

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Paoli, Inc.
201 E. Martin Street
Orleans, Indiana 47452**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| | |
|--|--|
| Operation Permit No.: T117-6003-00014 | |
| Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality | Issuance Date: Expiration Date: |

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

SECTION B GENERAL CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
- B.3 Enforceability [326 IAC 2-7-7]
- B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
- B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
- B.12 Emergency Provisions [326 IAC 2-7-16]
- B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
- B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
- B.17 Permit Renewal [326 IAC 2-7-4]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]
- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

SECTION C SOURCE OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Identification of Emission Units and Stacks
- C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]
- C.3 Opacity [326 IAC 5-1]
- C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.6 Fugitive Dust Emissions [326 IAC 6-4]
- C.7 Operation of Equipment [326 IAC 2-7-6(6)]
- C.8 Stack Height [326 IAC 1-7]
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

TABLE OF CONTENTS (Continued)

Testing Requirements [326 IAC 2-7-6(1)]

- C.10 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

- C.11 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
- C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.1.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]
- D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.1.5 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.7 VOC Emissions
- D.1.8 Volatile Organic Compounds (VOC)
- D.1.9 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.10 Operator Training Program

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.11 Record Keeping Requirements
- D.1.12 Reporting Requirements

TABLE OF CONTENTS (Continued)

SECTION D.2 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.2.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]
- D.2.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.2.5 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.2.7 VOC Emissions
- D.2.8 Volatile Organic Compounds (VOC)
- D.2.9 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.2.10 Operator Training Program

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.2.11 Record Keeping Requirements
- D.2.12 Reporting Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Best Available Control Technology (BACT) Condition (326 IAC 2-2-3(a))
- D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.3.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]
- D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.3.5 Particulate Matter (PM) [326 IAC 6-3-2]
- D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.7 VOC Emissions
- D.3.8 Volatile Organic Compounds (VOC)
- D.3.9 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.10 Operator Training Program

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.11 Record Keeping Requirements
- D.3.12 Reporting Requirements

SECTION D.4 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.4.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

TABLE OF CONTENTS (Continued)

- D.4.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]
- D.4.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.4.5 Particulate Matter (PM) [326 IAC 6-3-2]
- D.4.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.7 VOC Emissions
- D.4.8 Volatile Organic Compounds (VOC)
- D.4.9 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.4.10 Operator Training Program

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.4.11 Record Keeping Requirements
- D.4.12 Reporting Requirements

SECTION D.5 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.5.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
- D.5.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]
- D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.5.5 Particulate Matter (PM) [326 IAC 6-3-2]
- D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.5.7 VOC Emissions
- D.5.8 Volatile Organic Compounds (VOC)
- D.5.9 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.10 Operator Training Program

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.5.11 Record Keeping Requirements
- D.5.12 Reporting Requirements

SECTION D.6 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Best Available Control Technology (BACT) Condition
- D.6.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.4 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.6.5 Visible Emissions Notations
- D.6.6 Parametric Monitoring
- D.6.7 Broken or Failed Bag Detection

TABLE OF CONTENTS (Continued)

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.8 Record Keeping Requirements

SECTION D.7 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Baghouse Limitations [326 IAC 2-7-1(21)(G)(xxix)]

D.7.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

D.7.3 Particulate Matter (PM) [326 IAC 6-3-2]

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.7.5 Particulate Matter (PM) [326 IAC 2-7-1(21)(G)(xxix)(DD)]

D.7.6 Baghouse Inspections [326 IAC 2-7-21(1)(G)(xxix)(FF)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.7 Visible Emissions Notations

D.7.8 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.9 Record Keeping Requirements

SECTION D.8 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6-3-2]

D.8.2 Particulate Matter (PM) Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Certification

Emergency Occurrence Report

Semi-Annual Report

Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) . The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary source that manufacturers and coats wood office furniture.

| | |
|------------------------------|--|
| Responsible Official: | Michael D. McCracken, Vice President of Operations |
| Source Address: | 201 E. Martin Street, Orleans, IN, 47452 |
| Mailing Address: | P.O. Box 30, Paoli, IN, 47454 |
| General Source Phone Number: | (812) 723-2791 |
| SIC Code: | 2521 |
| County Location: | Orange |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act |

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Surface Coating Operations

- (a) One (1) NGR #3 Booth, identified as F2A, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2A.
- (b) One (1) Topcoat #1 Booth, identified as F6A, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6A.
- (c) One (1) Topcoat #2 Booth, identified as F6B, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6B.
- (d) One (1) SAP #1 Booth, identified as F1, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F1.
- (e) One (1) SAP #3 Booth, identified as F12, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F12.
- (f) One (1) NGR #1 Booth, identified as F2, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2.
- (g) One (1) Washcoat Booth, identified as F3, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F3.

- (h) One (1) Wipestain Booth, identified as F4, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F4.
- (i) One (1) Sealer Booth, identified as F5, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F5.
- (j) One (1) Topcoat #3 Booth, identified as F6, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6.
- (k) One (1) Repair Booth, identified as F13, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F13.
- (l) One (1) SAP Booth, identified as F15, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F15.
- (m) One (1) NGR #1 Booth, identified as F16, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F16.
- (n) One (1) Repair Booth, identified as F10, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F10.
- (o) One (1) SAP/NGR #1 Booth, identified as F14, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F14.
- (p) One (1) Wipestain Booth, identified as F11, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F11.
- (q) One (1) Topcoat Booth, identified as F8, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F8.
- (r) One (1) Drawer Enamel Booth, identified as F9, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F9.
- (s) One (1) Drawer Coat Booth, identified as F7, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F7.
- (t) One (1) SAP #2 Booth, identified as F18, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F18.
- (u) One (1) NGR #2 Booth, identified as G1, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack G1.
- (v) One (1) Washcoat Booth, identified as F17, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F17.
- (w) One (1) Wipestain Booth, identified as F19, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F19.

- (x) One (1) Topcoat #1 and #3 Booth, identified as F23, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F23.
- (y) One (1) Topcoat #2 and Sealer Booth, identified as F22, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F22.
- (z) One (1) SAP Booth, identified as F45, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F45.
- (aa) One (1) NGR Booth, identified as F46, constructed in 1998, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F46.
- (bb) One (1) Washcoat Booth, identified as F47, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F47.
- (cc) One (1) Topcoat and Sealer Booth, identified as F25, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F25.
- (dd) One (1) Repair Booth, identified as F24, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F24.
- (ee) One (1) SAP/NGR #1 Booth, identified as F20, constructed in 1995, with a maximum capacity of 3.125 units per hour, emissions controlled by a dry filter, exhausting to stack F20.
- (ff) One (1) Washcoat Booth, identified as F21, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F21.
- (gg) One (1) Topcoat and Sealer Booth, identified as C12, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack C12.
- (hh) One (1) Wipestain Booth, identified as F26, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F26.
- (ii) One (1) Repair Booth, identified as F44, constructed in 1997, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F44.
- (jj) One (1) SAP Booth, identified as C1, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C1.
- (kk) One (1) NGR Booth, identified as C2, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C2.
- (ll) One (1) SAP/NGR #1 Booth, identified as C3, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C3.
- (mm) One (1) SAP/NGR #3 Booth, identified as C10, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C10.

- (nn) One (1) Washcoat Booth, identified as C4, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C4.
- (oo) One (1) Wipestain Booth, identified as C5, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C5.
- (pp) One (1) Sealer #1 Booth, identified as C8, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C8.
- (qq) One (1) Topcoat #1 and Sealer #2 Booth, identified as C7, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C7.
- (rr) One (1) Topcoat #2 Booth, identified as C6, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C6.
- (ss) One (1) Repair Booth, identified as C9, constructed in 1995, with a maximum capacity of 9 units per hour, emissions controlled by a dry filter, exhausting to stack C9.
- (tt) One (1) Mix Booth, identified as C11, constructed in 1997, with a maximum capacity of 1 unit per hour, emissions controlled by a dry filter, exhausting to stack C11.
- (uu) One (1) Repair Booth, identified as F30, constructed in 1998, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F30.
- (vv) One (1) Wipestain Booth, identified as F27, constructed in 1999, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F27.
- (ww) One (1) Topcoat #1 and #3 Booth, identified as F29, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F29.
- (xx) One (1) Topcoat #2 and Sealer Booth, identified as F28, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F28.
- (yy) One (1) Robotic Spray Booth, identified as U1, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by water pans, exhausting to stack U1.
- (zz) One (1) Topcoat Booth, identified as U1A/U1B/U1C/U2, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by dry filters, exhausting to stacks U1A, U1B, U1C, or U2.
- (aaa) One (1) NGR Booth, identified as U3, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U3.
- (bbb) One (1) Sealer Booth, identified as U4, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U4.
- (ccc) One (1) Wipestain Booth, identified as U5, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U5.

- (ddd) One (1) Washcoat Booth, identified as U6, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U6.

Wood Milling and Assembly Operations

- (eee) One (1) Wood Milling Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC 4 and DC 6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.
- (fff) One (1) Furniture Assembly Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC4 and DC6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Woodworking facilities, identified as DC7/8 and DC9/10, constructed in 1996, with a maximum capacity of 4,800 pounds per hour, with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air, emissions controlled by two baghouses, exhausting to stack 7. [326 IAC 2-7-1(21)(G)(xxix)][326 IAC 6-3-2]
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations. [326 IAC 6-3-2]
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: one (1) 3.6 MMBtu/hr boiler. [326 IAC 6-2-4]
- (d) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (e) Paved and unpaved roads and parking lots with public access.
- (f) Other activities with particulate emissions equal to or less than 5 lb/hr or 25 lb/day: Woodworking operations and sawdust storage.
- (g) Activities with VOC emissions equal to or less than 3 lb/hour or 15 lb/day: Two (2) dip tanks with a total maximum capacity of 42.125 units per hour; one (1) test booth, identified as R&D1, constructed in 1998, with a maximum capacity of 12 oz. stain per 8 hour day.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1st of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
 - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The

Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) In addition to the applicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:
- (1) Condition 8(a) from CP 117-5122-00014, issued on August 26, 1996, limiting the facilities U1, U1A/U1B/U1C/U2, U3, U4, U5, U6, U7, U8, and U9 to less than 3.24 tons of VOC per month has been modified to reflect the fact that booths U7, U8, and U9 were never constructed. Therefore, this limit applies to booths U1, U1A/U1B/U1C/U2, U3, U4, U5, and U6.
 - (2) Condition 8(b) from CP 117-5122-00014, issued on August 26, 1996, listing requirements pursuant to 326 IAC 2-2, is not applicable because IDEM, OAQ has determined that the Tellus Plant lines 1 and 2, consisting of sixteen (16) spray booths (T1-T16), were never constructed.
 - (3) Condition 8(c) from CP 117-5122-00014, issued on August 26, 1996, listing requirements pursuant to 326 IAC 2-2, is not applicable because IDEM, OAQ has determined that the Tellus Line, Off Gun Line, Deskline 2 additions, Conference Table Line additions, Drawer Assembly Line additions, and Chair Line additions were never constructed.
 - (4) Condition 7 from CP 117-4210-00014, issued on March 28, 1995, listing requirements pursuant to 326 IAC 6-2-4 is not applicable because IDEM, OAQ has determined that the wood-fired boiler B1, was never constructed.
 - (5) Conditions 12, 13, and 14 from CP 117-9309-00014, issued on March 20, 1998, limiting PM emissions from the Finish Sander, listing compliance requirements for the baghouse controlling emissions from the Finish Sander, and listing monitoring requirements from the Finish Sander's exhaust are not applicable because IDEM, OAQ has determined that the Finish Sander is no longer in operation as it has been removed from the source.
 - (6) Conditions 4, 9, 10, and 11 from CP 117-4210-00014, issued on March 28, 1995, requiring testing of, limiting emissions from, and requiring monitoring of baghouse DC2 are not applicable because IDEM, OAQ has determined that the baghouse DC2, was never constructed.
 - (7) Condition 4 from CP 117-4210-00014, issued on March 28, 1995, requiring testing of baghouses DC4 and DC6 is not applicable because IDEM, OAQ has determined that the controlled PM emissions from baghouses DC4 and DC6 are less than the allowable emissions required pursuant to 326 IAC 6-3-2. The baghouse specifications stated in the original construction permit application indicated that the maximum particulate matter (PM) emissions from the woodworking baghouses would exceed the allowable PM emissions pursuant to 326 IAC 6-3-2 (Process Operations). Based on the design outlet grain loadings and air flow rates stated in the original application, the potential PM emissions after control were originally estimated at 32.02 pounds per hour. Pursuant to 326 IAC 6-3, the allowable PM emission rate is 9.145 pounds per hour for a process weight rate of 6,622.65 pounds per hour. Therefore, the outlet grain loadings for baghouses DC4 and DC6 were limited to 0.008 gr/dscf. These limits reduced the PM potential to emit to 9.10 pounds per hour to achieve compliance with the allowable PM emission rate. Stack testing was required to demonstrate that the reduced outlet grain loadings were not being exceeded at the maximum production rate.

The Office of Air Quality (OAQ) received and reviewed an application from Paoli, Inc. for a permit revision to PSD permit, CP 117-4210-00014, as previously amended by A 117-8544-00014. The application requested removal of the stack testing requirement for two baghouse dust collectors on the woodworking operations, identified as DC4 and DC6.

Removal of the stack test requirements have been approved by the OAQ Compliance Branch, provided that there is a condition that there are no visible emissions from the building openings. This requirement was already included in the original permit. Visible emission notations, quarterly inspection, and bag failure requirements have been added consistent with current compliance monitoring requirements for Title V woodworking sources.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (i) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting program approved into the state implementation plan have been either:
 - (1) Incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized official" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirement of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OA, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

| |
|---------------|
| Entire Source |
|---------------|

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Identification of Emission Units and Stacks [326 IAC 2-7-6]

The Permittee shall maintain an up-to-date plant layout print that clearly identifies the location each spray booth and stack exhaust at the source. The plant layout print, which will be kept at the source, will facilitate compliance determination, inspections, monitoring, and record keeping for each spray booth and exhaust stack.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [326 IAC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.18 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1st of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 1:

- (a) One (1) NGR #3 Booth, identified as F2A, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2A.
- (b) One (1) Topcoat #1 Booth, identified as F6A, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6A.
- (c) One (1) Topcoat #2 Booth, identified as F6B, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6B.
- (k) One (1) Repair Booth, identified as F13, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F13.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-2932-00014, issued January 12, 1994, facilities F2A, F6A, F6B, and F13 shall use less than 20 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC from these booths to less than 240 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the paint booths except when otherwise specified in 40 CFR Part 60, Subpart JJ.

D.1.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]

- (a) The wood furniture coating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63 Subpart JJ). A copy of this rule is attached. Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 1.0 pound VHAP per pound solids; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content on one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or

- (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
- (2) Limit VHAP emissions from contact adhesives as follows:
 - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids.
 - (B) For all contact adhesives (except aerosols and contact adhesives applied to nonporous substances) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (b) Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within the first sixty (60) calendar days of startup. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
 - (1) Operator training courses.
 - (2) Leak inspection and maintenance plan.
 - (3) Cleaning and washoff solvent accounting system.
 - (4) Chemical composition of cleaning and washoff solvents.
 - (5) Spray booth cleaning.
 - (6) Storage requirements.
 - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
 - (8) Line cleaning.
 - (9) Gun cleaning.
 - (10) Washoff operations.
 - (11) Formulation assessment plan for finishing operations.
- (c) Pursuant to 40 CFR 63, Subpart JJ, an Initial Compliance Report must be submitted within sixty (60) calendar days of startup and a Continuous Compliance Demonstration Report must be submitted within thirty (30) days following every six (6) month period, thereafter.

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 117-2932-00014, issued January 12, 1994, and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the surface coating operations shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the dry filters.

Compliance Determination Requirements

D.1.7 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated within 30 days of the end of each quarter based on the total volatile organic compound usage for the previous twelve month consecutive period.

D.1.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.9 Particulate Matter (PM)

Pursuant to 117-2932-00014, issued January 12, 1994, and in order to comply with D.1.5, the dry filters for PM control shall be in proper placement and control emissions from the paint booths at all times when the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.10 Operator Training Program

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (b) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain copies of the training program, the list of trained operators, additional inspections prescribed by the Preventive Maintenance Plan, and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.

- (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
- (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
- (4) The VHAP content in weight percent of each thinner used.
- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (d) To document compliance with Condition D.1.3(b), the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.3 and the Certification form, shall be submitted to the addresses listed in Section C - General Reporting Requirements of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 1:

- (d) One (1) SAP #1 Booth, identified as F1, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F1.
- (e) One (1) SAP #3 Booth, identified as F12, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F12.
- (f) One (1) NGR #1 Booth, identified as F2, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2.
- (g) One (1) Washcoat Booth, identified as F3, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F3.
- (h) One (1) Wipestain Booth, identified as F4, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F4.
- (i) One (1) Sealer Booth, identified as F5, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F5.
- (j) One (1) Topcoat #3 Booth, identified as F6, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6.

Deskline 2:

- (l) One (1) SAP Booth, identified as F15, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F15.
- (m) One (1) NGR #1 Booth, identified as F16, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F16.

Deskline 1 & 2:

- (n) One (1) Repair Booth, identified as F10, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F10.

Deskline 5:

- (o) One (1) SAP/NGR #1 Booth, identified as F14, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F14.
- (p) One (1) Wipestain Booth, identified as F11, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F11.
- (q) One (1) Topcoat Booth, identified as F8, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F8.

SECTION D.2 FACILITY OPERATION CONDITIONS (Continued)

Drawerline:

- (r) One (1) Drawer Enamel Booth, identified as F9, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F9.
- (s) One (1) Drawer Coat Booth, identified as F7, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-2759-00014, issued August 6, 1994, facilities F1 through F12, and F14 through F16 shall use less than 20 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC from these booths to less than 240 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the paint booths except when otherwise specified in 40 CFR Part 60, Subpart JJ.

D.2.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63 Subpart JJ). A copy of this rule is attached. Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 1.0 pound VHAP per pound solids; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content on one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:

- (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids.
 - (B) For all contact adhesives (except aerosols and contact adhesives applied to nonporous substances) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (b) Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within the first sixty (60) calendar days of startup. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
- (1) Operator training courses.
 - (2) Leak inspection and maintenance plan.
 - (3) Cleaning and washoff solvent accounting system.
 - (4) Chemical composition of cleaning and washoff solvents.
 - (5) Spray booth cleaning.
 - (6) Storage requirements.
 - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
 - (8) Line cleaning.
 - (9) Gun cleaning.
 - (10) Washoff operations.
 - (11) Formulation assessment plan for finishing operations.
- (c) Pursuant to 40 CFR 63, Subpart JJ, an Initial Compliance Report must be submitted within sixty (60) calendar days of startup and a Continuous Compliance Demonstration Report must be submitted within thirty (30) days following every six (6) month period, thereafter.

D.2.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 117-2759-00014, issued August 6, 1994, and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application

Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.2.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the surface coating operations shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the dry filters.

Compliance Determination Requirements

D.2.7 VOC Emissions

Compliance with Condition D.2.1 shall be demonstrated within 30 days of the end of each quarter based on the total volatile organic compound usage for the previous twelve month consecutive period.

D.2.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.2.1 and D.2.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.9 Particulate Matter (PM)

Pursuant to 117-2759-00014, issued August 6, 1994 and in order to comply with D.2.5, the dry filters for PM control shall be in proper placement and control emissions from the paint booths at all times when the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.10 Operator Training Program

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (b) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.2.10, the Permittee shall maintain copies of the training program, the list of trained operators, additional inspections prescribed by the Preventive Maintenance Plan, and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) To document compliance with Condition D.2.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.2.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.

- (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
- (4) The VHAP content in weight percent of each thinner used.
- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (d) To document compliance with Condition D.2.3(b), the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.2.3 and the Certification form, shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 1:

- (t) One (1) SAP #2 Booth, identified as F18, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F18.
- (u) One (1) NGR #2 Booth, identified as G1, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack G1.

Deskline 2:

- (v) One (1) Washcoat Booth, identified as F17, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F17.
- (w) One (1) Wipestain Booth, identified as F19, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F19.
- (x) One (1) Topcoat #1 and #3 Booth, identified as F23, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F23.
- (y) One (1) Topcoat #2 and Sealer Booth, identified as F22, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F22.

Deskline 3:

- (z) One (1) SAP Booth, identified as F45, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F45.
- (aa) One (1) NGR Booth, identified as F46, constructed in 1998, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F46.
- (bb) One (1) Washcoat Booth, identified as F47, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F47.

Deskline 4:

- (cc) One (1) Topcoat and Sealer Booth, identified as F25, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F25.
- (dd) One (1) Repair Booth, identified as F24, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F24.

Deskline 6:

- (ee) One (1) SAP/NGR #1 Booth, identified as F20, constructed in 1995, with a maximum capacity of 3.125 units per hour, emissions controlled by a dry filter, exhausting to stack F20.
- (ff) One (1) Washcoat Booth, identified as F21, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F21.
- (gg) One (1) Topcoat and Sealer Booth, identified as C12, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack C12.

SECTION D.3 FACILITY OPERATION CONDITIONS (Continued)

(hh) One (1) Wipestain Booth, identified as F26, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F26.

(ii) One (1) Repair Booth, identified as F44, constructed in 1997, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F44.

Chairline:

(jj) One (1) SAP Booth, identified as C1, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C1.

(kk) One (1) NGR Booth, identified as C2, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C2.

(ll) One (1) SAP/NGR #1 Booth, identified as C3, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C3.

(mm) One (1) SAP/NGR #3 Booth, identified as C10, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C10.

(nn) One (1) Washcoat Booth, identified as C4, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C4.

(oo) One (1) Wipestain Booth, identified as C5, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C5.

(pp) One (1) Sealer #1 Booth, identified as C8, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C8.

(qq) One (1) Topcoat #1 and Sealer #2 Booth, identified as C7, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C7.

(rr) One (1) Topcoat #2 Booth, identified as C6, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C6.

(ss) One (1) Repair Booth, identified as C9, constructed in 1995, with a maximum capacity of 9 units per hour, emissions controlled by a dry filter, exhausting to stack C9.

(tt) One (1) Mix Booth, identified as C11, constructed in 1997, with a maximum capacity of 1 unit per hour, emissions controlled by a dry filter, exhausting to stack C11.

(The information describing the process contained in this facility description box is descriptive

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Best Available Control Technology (BACT) Condition (326 IAC 2-2-3(a))

Pursuant to CP 117-4210-00014, issued March 28, 1995, and 326 IAC 2-2-3(a), facilities F17 through F26, F44 through F47, G1, and C1 through C12, shall use:

- (a) Less than thirty-seven (37) tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This limit is equivalent to less than four hundred and forty-five (445) tons VOC, calculated on a twelve month average rolled on a monthly basis. This usage limit is based upon actual hours of operation and has been determined to serve as the BACT for this source;
- (b) Dry filters for overspray control; and
- (c) HVLP spray application methods when applying SAP stain, NGR, and washcoats; and air-assisted airless or airless application methods when applying sealers, topcoats, fillers, and wipestains.

In addition, the following pollution prevention techniques shall be applied:

- (d) The cleanup solvents shall be stored in closed containers with soft gasketed spring-loaded closures,
- (e) The cleanup rags saturated with solvent be stored, transported, and disposed of in containers that are closed tightly, and
- (f) The spray guns used are the type that can be cleaned without the need for spraying the solvent into the air.

D.3.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the paint booths except when otherwise specified in 40 CFR Part 60, Subpart JJ.

D.3.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63 Subpart JJ). A copy of this rule is attached. Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 1.0 pound VHAP per pound solids; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content on one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:

- (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids.
 - (B) For all contact adhesives (except aerosols and contact adhesives applied to nonporous substances) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (b) Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within the first sixty (60) calendar days of startup. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
- (1) Operator training courses.
 - (2) Leak inspection and maintenance plan.
 - (3) Cleaning and washoff solvent accounting system.
 - (4) Chemical composition of cleaning and washoff solvents.
 - (5) Spray booth cleaning.
 - (6) Storage requirements.
 - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
 - (8) Line cleaning.
 - (9) Gun cleaning.
 - (10) Washoff operations.
 - (11) Formulation assessment plan for finishing operations.
- (c) Pursuant to 40 CFR 63, Subpart JJ, an Initial Compliance Report must be submitted within sixty (60) calendar days of startup and a Continuous Compliance Demonstration Report must be submitted within thirty (30) days following every six (6) month period, thereafter.

D.3.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application

Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.3.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP 117-4210-00014, issued March 28, 1995, and pursuant to 326 IAC 6-3-2, the PM from the surface coating operations shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the dry filters.

Compliance Determination Requirements

D.3.7 VOC Emissions

Compliance with Condition D.3.1 shall be demonstrated within 30 days of the end of each quarter based on the total volatile organic compound usage for the previous twelve month consecutive period.

D.3.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.1 and D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.3.9 Particulate Matter (PM)

Pursuant to CP 117-4210-00014, issued March 28, 1995, and in order to comply with Conditions D.3.1 and D.3.5, the dry filters for PM control shall be in proper placement and control emissions from the surface coating facilities at all times when the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.10 Operator Training Program

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.

- (b) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.11 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.3.10, the Permittee shall copies of the training program, the list of trained operators, additional inspections prescribed by the Preventive Maintenance Plan, and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) To document compliance with Condition D.3.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.3.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
 - (4) The VHAP content in weight percent of each thinner used.

- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (d) To document compliance with Condition D.3.3(b), the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.3.3 and the Certification form, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 2:

- (uu) One (1) Repair Booth, identified as F30, constructed in 1998, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F30.

Deskline 3:

- (vv) One (1) Wipestain Booth, identified as F27, constructed in 1999, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F27.
- (ww) One (1) Topcoat #1 and #3 Booth, identified as F29, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F29.
- (xx) One (1) Topcoat #2 and Sealer Booth, identified as F28, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F28.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-5122-00014, issued on August 27, 1996, facilities F27, F28, F29, and F30 shall use less than 2.86 tons of VOC per month, including coatings, dilution solvents, and cleaning solvents. This usage limit is required to limit the potential to emit of VOC, from these booths, to less than 34.3 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.4.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the paint booths except when otherwise specified in 40 CFR Part 60, Subpart JJ.

D.4.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63 Subpart JJ). A copy of this rule is attached. Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
- (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
- (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 1.0 pound VHAP per pound solids; or

- (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content on one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:
 - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids.
 - (B) For all contact adhesives (except aerosols and contact adhesives applied to nonporous substances) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
 - (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (b) Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within the first sixty (60) calendar days of startup. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
- (1) Operator training courses.
 - (2) Leak inspection and maintenance plan.
 - (3) Cleaning and washoff solvent accounting system.
 - (4) Chemical composition of cleaning and washoff solvents.
 - (5) Spray booth cleaning.
 - (6) Storage requirements.
 - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
 - (8) Line cleaning.
 - (9) Gun cleaning.
 - (10) Washoff operations.

(11) Formulation assessment plan for finishing operations.

- (c) Pursuant to 40 CFR 63, Subpart JJ, an Initial Compliance Report must be submitted within sixty (60) calendar days of startup and a Continuous Compliance Demonstration Report must be submitted within thirty (30) days following every six (6) month period, thereafter.

D.4.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 117-5122-00014, issued on August 27, 1996, and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.4.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the surface coating operations shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.4.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the dry filters.

Compliance Determination Requirements

D.4.7 VOC Emissions

Compliance with Condition D.4.1 shall be demonstrated within 30 days of the end of each quarter based on the total volatile organic compound usage for the previous twelve month consecutive period.

D.4.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.4.1 and D.4.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.4.9 Particulate Matter (PM)

In order to comply with D.4.5, the dry filters for PM control shall be in proper placement and control emissions from the paint booths at all times when the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.10 Operator Training Program

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (b) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.11 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.4.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.4.10, the Permittee shall maintain copies of the training program, the list of trained operators, additional inspections prescribed by the Preventive Maintenance Plan, and training records shall be maintained on site or available within 1 hour for inspection by IDEM.

- (c) To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.4.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
 - (4) The VHAP content in weight percent of each thinner used.
 - (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (d) To document compliance with Condition D.4.3(b), the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Conditions D.4.3 and the Certification form, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-601

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

UV Line:

- (yy) One (1) Robotic Spray Booth, identified as U1, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by water pans, exhausting to stack U1.
- (zz) One (1) Topcoat Booth, identified as U1A/U1B/U1C/U2, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by dry filters, exhausting to stacks U1A, U1B, U1C, or U2.
- (aaa) One (1) NGR Booth, identified as U3, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U3.
- (bbb) One (1) Sealer Booth, identified as U4, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U4.
- (ccc) One (1) Wipestain Booth, identified as U5, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U5.
- (ddd) One (1) Washcoat Booth, identified as U6, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-9309-00014, issued on March 20, 1998, facilities U1A/U1B/U1C/U2, U4, U5, and U6, shall use less than 3.24 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC, from these booths, to less than 39 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.5.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the paint booths except when otherwise specified in 40 CFR Part 60, Subpart JJ.

D.5.3 Wood Furniture Manufacturing Limits [40 CFR Part 63, Subpart JJ]

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63 Subpart JJ). A copy of this rule is attached. Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

- (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:

- (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 1.0 pound VHAP per pound solids; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content on one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:
 - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids.
 - (B) For all contact adhesives (except aerosols and contact adhesives applied to nonporous substances) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
 - (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (b) Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within the first sixty (60) calendar days of startup. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
- (1) Operator training courses.
 - (2) Leak inspection and maintenance plan.
 - (3) Cleaning and washoff solvent accounting system.
 - (4) Chemical composition of cleaning and washoff solvents.
 - (5) Spray booth cleaning.
 - (6) Storage requirements.
 - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
 - (8) Line cleaning.
 - (9) Gun cleaning.

- (10) Washoff operations.
- (11) Formulation assessment plan for finishing operations.
- (c) Pursuant to 40 CFR 63, Subpart JJ, an Initial Compliance Report must be submitted within sixty (60) calendar days of startup and a Continuous Compliance Demonstration Report must be submitted within thirty (30) days following every six (6) month period, thereafter.

D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 117-9309-00014, issued on March 20, 1998, and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.5.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 117-9309-00014, issued on March 20, 1998, and 326 IAC 6-3-2, the PM from the surface coating operations shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the dry filters.

Compliance Determination Requirements

D.5.7 VOC Emissions

Compliance with Condition D.5.1 shall be demonstrated within 30 days of the end of each quarter based on the total volatile organic compound usage for the previous twelve month consecutive period.

D.5.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.5.1 and D.5.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.5.9 Particulate Matter (PM)

In order to comply with D.5.5, the dry filters for PM control shall be in proper placement and control emissions from the paint booths at all times when the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.10 Operator Training Program

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (b) Training shall include proper filter alignment, filter inspection and maintenance, proper pan water level, water pan inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.11 Record Keeping Requirements

- (a) To document compliance with Condition D.5.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.5.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.

- (b) To document compliance with Condition D.5.10, the Permittee shall maintain copies of the training program, the list of trained operators, additional inspections prescribed by the Preventive Maintenance Plan, and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) To document compliance with Condition D.5.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.5.3.
 - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
 - (4) The VHAP content in weight percent of each thinner used.
 - (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (d) To document compliance with Condition D.5.3(b), the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.12 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.5.3 and the Certification form, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The report required by (b) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Wood Milling and Assembly Operations:

- (eee) One (1) Wood Milling Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC 4 and DC 6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.
- (fff) One (1) Furniture Assembly Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC 4 and DC 6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Best Available Control Technology (BACT) Condition

Pursuant to CP 117-4210-00014, issued on March 28, 1995, the baghouses have been determined to be BACT for the Wood Milling and Furniture Assembly processes. The allowable outlet grain loadings from baghouses DC4 and DC6 are 0.008 grains per dry standard cubic foot (gr/dscf) each, with the input gas flow rates not to exceed 61,000 dry standard cubic feet per minute (dscfm) each. The PM emissions from the Wood Milling and Furniture Assembly operations shall be in compliance provided that the visible emissions from stacks 4 and 6 are limited to ten (10) percent opacity and there no are visible emissions from the building openings.

The equivalent allowable particulate matter (PM) emissions for the wood milling and assembly processes are 18.3 tons per year, each. Compliance with this limit will satisfy the requirements of 326 IAC 6-3-2.

D.6.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP 117-4210-00014, issued on March 28, 1995, and pursuant to 326 IAC 6-3-2, the PM from the Wood Milling and Furniture Assembly processes shall not exceed 9.14 pounds per hour each when operating at a process weight rate of 6,622.65 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their baghouses.

Compliance Determination Requirements

D.6.4 Particulate Matter (PM)

Pursuant to CP 117-4210-00014, issued on March 28, 1995, and in order to comply with Conditions D.6.1 and D.6.2, the baghouses for PM control shall be in operation and control emissions from the Wood Milling and Furniture Assembly operations at all times that the facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Visible Emissions Notations

- (a) Daily visible emission notations of the Wood Milling and Furniture Assembly stack exhaust (stacks 4 and 6) shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.6.6 Parametric Monitoring

Pursuant to CP 117-4210-00014, issued on March 28, 1995, the Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Wood Milling and Furniture Assembly operations, at least once weekly when the wood milling and furniture assembly are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.6.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.8 Record Keeping Requirements

- (a) To document compliance with Condition D.6.5, the Permittee shall maintain records of daily visible emission notations of the wood milling and furniture assembly stack exhaust when venting to the atmosphere.
- (b) To document compliance with Condition D.6.6, the Permittee shall maintain the following:
 - (1) Weekly records of the inlet and outlet differential static pressure during normal operation when venting to the atmosphere; and
 - (2) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

Woodworking Operations:

- (a) Woodworking facilities, identified as DC7/8 and DC9/10, constructed in 1996, with a maximum capacity of 4,800 pounds per hour, with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air, emissions controlled by two baghouses, exhausting to stack 7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Baghouse Limitations [326 IAC 2-7-1(21)(G)(xxix)]

The woodworking operations controlled by a baghouse shall be an insignificant activity for Title V permitting purposes provided that the baghouse operations meet the requirements of 326 IAC 2-7-1(21)(G)(xxix), including the following:

- (a) Each woodworking baghouse shall not exhaust to the atmosphere greater than one hundred twenty-five thousand (125,000) cubic feet of air per minute and shall not emit particulate matter with a diameter less than ten (10) microns in excess of three-thousandths (0.003) grain per dry standard cubic foot of outlet air.
- (b) The opacity from each baghouse shall not exceed ten percent (10%).
- (c) Visible emissions from the baghouse shall be observed daily, when exhausting to the atmosphere, using procedures in accordance with Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:
- (1) The baghouse shall be inspected.
 - (2) Corrective actions, such as replacing or reseating bags, are initiated, when necessary.

Compliance with these limitations will satisfy the requirements of Condition D.7.2 (326 IAC 2-2) and D.7.3 (326 IAC 6-3-2).

D.7.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to CP 117-5122-00014, issued on August 26, 1996, the particulate emissions from the woodworking facilities exhausting to stack 7 shall not exceed 5.7 pounds PM per hour and 3.4 pounds PM-10 per hour. This limit is required to limit the potential to emit of PM to less than 25 tons and PM-10 to less than 15 tons, per 12 consecutive month period. Compliance with this limit will satisfy the requirements of 326 IAC 6-3-2.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.7.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 the PM emissions from the woodworking facilities exhausting to stack 7 shall not exceed 7.37 pounds PM per hour when operating at a process weight rate of 4,800 pounds per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control equipment.

Compliance Determination Requirements

D.7.5 Particulate Matter (PM) [326 IAC 2-7-1(21)(G)(xxix)(DD)]

Pursuant to CP 117-5122-00014, issued on August 26, 1996, and in order to comply with conditions D.7.1, D.7.2 and D.7.3, the baghouse/cyclone combination for PM control shall be in operation and control emissions from the woodworking facilities exhausting to stack 7 at all times that the facilities are in operation.

D.7.6 Baghouse Inspections [326 IAC 2-7-21(1)(G)(xxix)(FF)]

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.7 Visible Emissions Notations

Should the source elect to not have the woodworking operations considered an insignificant activity for Title V permitting purposes, the Method 22 readings required in Condition D.7.1(c) are not required, and will be replaced by the following:

- (a) Daily visible emission notations of the Woodworking Process stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.7.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.7.1(c) and D.7.7, the Permittee shall maintain records of daily visible emission notations of the baghouse exhaust when exhausting to the atmosphere.
- (b) To document compliance with Condition D.7.6, the Permittee shall maintain records of the results of the inspections required under Condition D.7.6 and the dates the vents are redirected.
- (c) The Permittee shall maintain records of corrective actions to document compliance with 326 IAC 2-7-21(1)(G)(xxix)(GG)(dd).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations. [326 IAC 6-3-2]
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: one (1) 3.6 MMBtu/hr boiler. [326 IAC 6-2-4]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), insignificant sources of particulate matter shall not exceed the allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.8.2 Particulate Matter (PM) Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to CP 117-9309-00014, issued on March 20, 1998 and pursuant to 326 IAC 6-2-4, the PM emissions from the 3.6 MMBtu/hr natural gas-fired boiler shall not exceed 0.6 pounds per million BTU heat input.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

| |
|---|
| Date/Time Emergency started: |
| Date/Time Emergency was corrected: |
| Was the facility being properly operated at the time of the emergency? Y N Describe: |
| Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**PART 70 OPERATING PERMIT
Semi-Annual Report
VOC and VHAP usage - Wood Furniture NESHAP**

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: All surface coating booths
Parameter: VOC and VHAPs - NESHAP
Limit:
(1) Finishing operations -1.0 lb VHAP/lb Solids
(2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight
(3) All other thinners - 10% VHAP content by weight
(4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids
(5) All other contact adhesives - 1.0 lb VHAP/lb Solids
(6) Strippable spray booth material - 0.8 pounds VOC per pound solids

| Month | Finishing Operations (lb VHAP/lb Solid) | Thinners (% by weight) | Thinner/Solvent mixtures (% by weight) | Foam adhesives (upholstered) (lb VHAP/lb Solid) | Contact adhesives (lb VHAP/lb Solid) | Strippable spray booth material (lb VOC/lb Solid) |
|-------|--|---------------------------|---|---|---|--|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |

9 No deviation occurred in this six month period.

9 Deviation/s occurred in this six month period.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F2A, F6A, F6B, and F13
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: Less than 20 tons per month (less than 240 tons per 12 consecutive month period)

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F1 through F12, and F14 through F16
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: less than 20 tons per month (less than 240 tons per 12 consecutive month period)

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F17 through F26, F44 through F47, G1, and C1 through C12,
inclusive
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents,
and cleaning solvents
Limit: Less than 37 tons per month (less than 445 tons calculated on a twelve month
average rolled on a monthly basis)

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F27, F28, F29, and F30
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: Less than 2.86 tons per month (less than 34.3 tons per 12 consecutive month period)

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: All spray booths of the UV line; U1A, U1B, U1C, U1, U2, U3, U4, U5, and U6
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: Less than 3.24 tons per month (less than 39 tons per 12 consecutive month period)

YEAR: _____

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

| | |
|--|-------------------------------|
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Background and Description

Source Name: Paoli, Inc.
Source Location: 201 E. Martin Street, Orleans, IN, 47452
County: Orange
SIC Code: 2521
Operation Permit No.: T117-6003-00014
Permit Reviewer: ERG/BS

On January 1, 2002, the Office of Air Quality (OAQ) had a notice published in the Paoli-News Republican, 174 Maple Street, Orleans, Indiana, stating that Paoli, Inc. had applied for a Part 70 Operating Permit to operate a source that manufacturers and coats wood office furniture. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 29, 2002 Paoli, Inc. provided comments on the proposed Part 70 permit. The following is a summary of the comments and responses to those comments. The Table Of Contents has been modified, if applicable, to reflect these changes.

Comment 1:

Not all of the insignificant activities listed in the TSD are included in Section A.3 of the permit. Paoli request these items be clearly listed in the body of the permit.

Response to Comment 1:

While the Title V Operating Permit rule requires that applications list all points of emissions (326 IAC 2-7-4 Permit Application) with additional provisions relating to insignificant and trivial activities (326 IAC 2-7-1 Definitions), the rule requires that the permit identify all applicable requirements (326 IAC 2-7-5 Permit Content). The OAQ ordinarily includes insignificant activities only as necessary to identify specific applicable requirements. During the development of the model Title V Operating Permit and the subsequent implementation of the program, this approach has been the consensus recommendation of both the regulated community and the OAQ. In many cases future additions or deletions of insignificant activities will not require a modification of this permit. It was felt that there would be less confusion if the permit did not give the impression that the rules required every insignificant activity to be listed in the permit. Nonetheless, the OAQ has added these activities to this permit in response to your request. This has no effect on future activities regarding insignificant activities. The following changes were made to the permit.

A.3 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities ~~which are specifically regulated~~, as defined in 326 IAC 2-7-1(21):

- (a) Woodworking facilities, identified as DC7/8 and DC9/10, constructed in 1996, with a maximum capacity of 4,800 pounds per hour, with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air, emissions controlled by two baghouses, exhausting to stack 7. [326 IAC 2-7-1(21)(G)(xxix)][326 IAC 6-3-2]
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations. [326 IAC 6-3-2]
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: one (1) 3.6 MMBtu/hr boiler. [326 IAC 6-2-4]
- (d) **Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.**
- (e) **Paved and unpaved roads and parking lots with public access.**
- (f) **Other activities with particulate emissions equal to or less than 5 lb/hr or 25 lb/day: Woodworking operations and sawdust storage.**
- (g) **Activities with VOC emissions equal to or less than 3 lb/hour or 15 lb/day: Two (2) dip tanks with a total maximum capacity of 42.125 units per hour; one (1) test booth, identified as R&D1, constructed in 1998, with a maximum capacity of 12 oz. stain per 8 hour day.**

Comment 2:

The Furniture Assembly Process is listed as a woodworking process along with the Wood Milling Process. The Furniture Assembly Process is not a woodworking process. All woodworking equipment is covered in the Milling Process. Please correct Section A and Section D.6.

Response to Comment 2:

The Furniture Assembly Process is not listed as a woodworking process in Section A and Section D.6. No changes have been made resulting from this comment.

Comment 3:

Although Paoli is willing to attempt to keep identification labels on the spray booths and woodworking facilities, requiring this as a permit condition in Condition C.1 is placing an undue burden on the source. This requirement has not been placed on this source in the past and, as far as Paoli knows, has not been placed on similar sources. Paoli is willing to offer an alternative to this method that would allow both Paoli and IDEM representatives to locate affected equipment. Paoli has plant layout prints that are used to identify the location of the spray booths. These prints are not affected by the routine cleaning of the booths as would be the individual labels or tags. Paoli requests that this condition be changed to allow for the use of

plant layout prints to identify the location of the spray booths. As such, Paoli requests that this condition be removed.

Response to Comment 3:

The IDEM, OAQ has determined that a plant layout print will sufficiently facilitate future inspections at the source. The following change to Condition C.1 was made to reflect this decision:

C.1 Identification of Emission Units and Stacks [326 IAC 2-7-6 20706(b)]

~~The Permittee shall clearly mark each spray booth located at the source with an identification tag. This identification will facilitate compliance determination, inspections, monitoring, and record keeping required for each of the facilities.~~ **The Permittee shall maintain an up-to-date plant layout print that clearly identifies the location each spray booth and stack exhaust at the source. The plant layout print, which will be kept at the source, will facilitate compliance determination, inspections, monitoring, and record keeping for each spray booth and exhaust stack.**

Comment 4:

Paoli requests that the Quarterly Deviation and Compliance Monitoring Report Form be changed to correctly note that this report is for reporting of deviations quarterly pursuant to Condition B.15. The pre-public notice version of Condition B.15(a) included two items that were not to be considered as deviations:

- (1) an excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

Condition B.15(a) requires reporting only of deviations while the original Condition B.15(b) excluded “an excursion from compliance monitoring parameters” unless tied to an applicable rule or limit. According to discussions with compliance staff, reportable deviations include an excursion that causes a violation of a permit limit or air rule or the failure to take a response action to correct an excursion. Therefore, not all excursions from monitoring parameters are deviations. To include the term “Compliance Monitoring” in the title of this report form is incorrect and misleading. The title of the report form should be corrected by deleting “and Compliance Monitoring”. This phrase should also be removed from the following conditions which are all referring to this form: B.15(a), B.15(c), and C.22(a). Paoli also requests that Condition B.15 be rewritten to include the original language noted above for B.15(b).

The first sentence of the report form is also not correct and should be deleted: “This report is an affirmation that the source has met all the requirements stated in this permit.” This report is for deviations and therefore is not “an affirmation that the source has met all the requirements.” The Annual Compliance Certification required by Condition B.10 requires the annual reporting on the compliance status of all requirements in the permit. To also require an affirmation on a quarterly basis “that the source has met all the requirements” is redundant and overburdensome.

Response to Comment 4:

The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements and Conditions and certain Parametric Monitoring conditions in the D section of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. The Parametric Monitoring conditions have been revised to establish normal operating conditions for the emission unit or control device and to require implementation of the compliance response plan when monitoring indicates

operation is outside the normal range. Language that inferred that operating outside of the normal range could be considered by itself to be a deviation was removed. B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations. 326 IAC 2-7-5(3) grants IDEM, OAQ the authority to require compliance monitoring reporting and deviation reporting. IDEM, OAQ decision to combine this reporting requirement exists for simplicity and to facilitate review and to clarify reporting obligations. The first sentence of the report form was deleted because the Quarterly Deviation and Compliance Monitoring Report Form is not meant to be an compliance certification.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit**, shall be reported according to the schedule stated in the applicable requirement and ~~do does~~ not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

D.6.6 Parametric Monitoring

Pursuant to CP 117-4210-00014, issued on March 28, 1995, the Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Wood Milling and Furniture Assembly operations, at least once weekly when the wood milling and furniture assembly are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable steps in accordance with Section C- Compliance Response Plan - **Preparation, Implementation, Records, and Reports** ~~Failure to Take Response Steps~~. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - **Preparation, Implementation,**

Records, and Reports ~~Failure to Take Response Steps~~, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014

Months: _____ to _____ Year: _____

Page 1 of 2

~~This report is an affirmation that the source has met all the requirements stated in this permit.~~ This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Comment 5:

Section D.7 should list two (2) baghouses, DC7/8 and DC 9/10 instead of the baghouse/cyclone combination. DC 9/10 was omitted from Section D.7. Both units draw dust from the facility but one dumps its collected waste to the storage bin of the other. Condition A.3(a) correctly identifies these baghouses. Please make the necessary changes.

Response to Comment 5:

The following changes have been made to accurately describe the equipment controlling emissions from the insignificant woodworking operations:

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

Woodworking Operations:

- (a) Woodworking facilities, identified as DC7/8 and **DC 9/10**, constructed in 1996, with a maximum capacity of 4,800 pounds per hour, with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air, emissions controlled by ~~a baghouse/cyclone combination~~ **two baghouses**, exhausting to stack 7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 6:

Booths U1(yy) and U3(aaa) are not listed on the related Quarterly Report Form and are not listed in the booth identification table starting on page 8 of the TSD.

Response to Comment 6:

As indicated in Response to Comment 1, no changes will be made to the TSD. However, the Quarterly Report Form has been modified, as follows, to include booths U1 and U3:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

| | |
|---------------------|---|
| Source Name: | Paoli, Inc. |
| Source Address: | 201 E. Martin Street, Orleans, IN, 47452 |
| Mailing Address: | P.O. Box 30, Paoli, IN, 47454 |
| Part 70 Permit No.: | T117-6003-00014 |
| Facilities: | All spray booths of the UV line; U1A, U1B, U1C, U1 , U2, U3 , U4, U5, and U6 |
| Parameter: | Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents |

Limit: Less than 3.24 tons per month (less than 39 tons per 12 consecutive month period)

Comment 7:

Paoli requests that Condition B.13(c)(6) be corrected so the last phrase reads "...OAQ has determined that the baghouse DC2, was never constructed."

Response to Comment 7:

Condition B.13 has been modified, as follows, to correctly indicate that baghouse DC2 was never constructed because baghouses DC4 and DC6 effectively control emissions from the Wood Milling and Furniture Assembly operations; clarify that CP 117-5122-00014 was issued in 1996, not 1999; and indicate that Condition B.13(b) is no longer needed as Condition B.14 (Prior Permits Superseded) has been added to the permit.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The

Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- ~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

- (eb) In addition to the applicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

- (1) Condition 8(a) from CP 117-5122-00014, issued on August 26, **1996** ~~1999~~, limiting the facilities U1, U1A/U1B/U1C/U2, U3, U4, U5, U6, U7, U8, and U9 to less than 3.24 tons of VOC per month has been modified to reflect the fact that booths U7, U8, and U9 were never constructed. Therefore, this limit applies to booths U1, U1A/U1B/U1C/U2, U3, U4, U5, and U6.
- (2) Condition 8(b) from CP 117-5122-00014, issued on August 26, 1996, listing requirements pursuant to 326 IAC 2-2, is not applicable because IDEM, OAQ has determined that the Tellus Plant lines 1 and 2, consisting of sixteen (16) spray booths (T1-T16), were never constructed.
- (3) Condition 8(c) from CP 117-5122-00014, issued on August 26, 1996, listing requirements pursuant to 326 IAC 2-2, is not applicable because IDEM, OAQ has determined that the Tellus Line, Off Gun Line, Deskline 2 additions,

Conference Table Line additions, Drawer Assembly Line additions, and Chair Line additions were never constructed.

- (4) Condition 7 from CP 117-4210-00014, issued on March 28, 1995, listing requirements pursuant to 326 IAC 6-2-4 is not applicable because IDEM, OAQ has determined that the wood-fired boiler B1, was never constructed.
- (5) Conditions 12, 13, and 14 from CP 117-9309-00014, issued on March 20, 1998, limiting PM emissions from the Finish Sander, listing compliance requirements for the baghouse controlling emissions from the Finish Sander, and listing monitoring requirements from the Finish Sander's exhaust are not applicable because IDEM, OAQ has determined that the Finish Sander is no longer in operation as it has been removed from the source.
- (6) Conditions 4, 9, 10, and 11 from CP 117-4210-00014, issued on March 28, 1995, requiring testing of, limiting emissions from, and requiring monitoring of baghouse DC2 are not applicable because IDEM, OAQ has determined that the ~~wood-fired boiler B1~~, **baghouse DC2**, was never constructed.

Comment 8:

Paoli requests that Section D.1 include item (k) from Section A (booth F13) as it was permitted under 117-2932-00014. This booth was incorrectly listed in Section D.2. Please make the appropriate corrections to the draft permit.

Response to Comment 8:

The following changes have been made to indicate that booth F13 was permitted under 117-2932-00014:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 1:

- (a) One (1) NGR #3 Booth, identified as F2A, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2A.
- (b) One (1) Topcoat #1 Booth, identified as F6A, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6A.
- (c) One (1) Topcoat #2 Booth, identified as F6B, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6B.
- (k) One (1) Repair Booth, identified as F13, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F13.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-2932-00014, issued January 12, 1994, facilities F2A, F6A, ~~and F6B, and F13~~ shall use less than 20 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC from these booths to less than 240 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Deskline 1:

- (d) One (1) SAP #1 Booth, identified as F1, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F1.
- (e) One (1) SAP #3 Booth, identified as F12, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F12.
- (f) One (1) NGR #1 Booth, identified as F2, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2.
- (g) One (1) Washcoat Booth, identified as F3, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F3.
- (h) One (1) Wipestain Booth, identified as F4, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F4.
- (i) One (1) Sealer Booth, identified as F5, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F5.
- (j) One (1) Topcoat #3 Booth, identified as F6, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6.
- ~~(k) One (1) Repair Booth, identified as F13, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F13...~~

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 117-2759-00014, issued August 6, 1994, facilities F1 through **F12 and F14 through F16** shall use less than 20 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC from these booths to less than 240 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F2A, F6A, ~~and F6B,~~ and F13
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: Less than 20 tons per month (less than 240 tons per 12 consecutive month period)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Paoli, Inc.
Source Address: 201 E. Martin Street, Orleans, IN, 47452
Mailing Address: P.O. Box 30, Paoli, IN, 47454
Part 70 Permit No.: T117-6003-00014
Facilities: Spray booths F1 through F12 and F14 through F16, ~~inclusive~~
Parameter: Aggregate VOCs delivered to the applicators, including coatings, dilution solvents, and cleaning solvents
Limit: less than 20 tons per month (less than 240 tons per 12 consecutive month period)

Comment 9:

Paoli requests that IDEM, OAQ add "when exhausting to the atmosphere" to the end of the first sentence in Condition D.7.1(c) to clarify that visible emission notations are not needed when venting to the inside of the building.

Response to Comment 9:

Condition D.7.1(c) has been revised, as follows, to indicate that visible emission notations are not required when the baghouse, controlling emissions from the insignificant woodworking operations, is exhausting to the inside of the building:

D.7.1 Baghouse Limitations [326 IAC 2-7-1(21)(G)(xxix)]

The woodworking operations controlled by a baghouse shall be an insignificant activity for Title V permitting purposes provided that the baghouse operations meet the requirements of 326 IAC 2-7-1(21)(G)(xxix), including the following:

- (a) Each woodworking baghouse shall not exhaust to the atmosphere greater than one hundred twenty-five thousand (125,000) cubic feet of air per minute and shall not emit

particulate matter with a diameter less than ten (10) microns in excess of three-thousandths (0.003) grain per dry standard cubic foot of outlet air.

- (b) The opacity from each baghouse shall not exceed ten percent (10%).
- (c) Visible emissions from the baghouse shall be observed daily, **when exhausting to the atmosphere**, using procedures in accordance with Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:
 - (1) The baghouse shall be inspected.
 - (2) Corrective actions, such as replacing or reseating bags, are initiated, when necessary.

Compliance with these limitations will satisfy the requirements of Condition D.7.2 (326 IAC 2-2) and D.7.3 (326 IAC 6-3-2).

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. Condition D.5.10(b) has been modified, as follows, to indicate what training is required to maintain the water pan system used to control emissions from spray booth U1.

D.5.10 Operator Training Program

The Permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (b) Training shall include proper filter alignment, filter inspection and maintenance, **proper pan water level, water pan inspection and maintenance**, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Updates 2 through 5 have been made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001, and become effective on January 19th, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the Internet at <http://www.state.in.us/idem/air/rules/apcb/packets/index.html>. The rule revisions will be published in the February 1, 2002 Indiana Register which can be found on the Internet at <http://www.IN.gov/legislative/register/index-25.html>.

2. Add the new rule cite to B.2 Permit Term.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

3. B.12 Emergency Provisions (a)(b) and (g) have been revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides an affirmative defense to an action brought for non-compliance with technology based emission limitations only.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation; ~~except as provided in 326 IAC 2-7-16.~~
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (g) ~~Operations may continue during an emergency only if the following conditions are met:~~
- (1) ~~If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~
- (2) ~~If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~
- (A) ~~The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
- (B) ~~Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

4. B.14 Multiple Exceedances has been deleted, because 326 IAC 2-7-5(1)(E) has been repealed, because it conflicted with 40 CFR 70.6(a)(6).

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

5. B.14 Prior Permits Superseded was added to the permit to help clarify the intent of the new rule 326 IAC 2-1.1-9.5.

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) **All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**

(1) **incorporated as originally stated,**

(2) **revised, or**

(3) **deleted**

by this permit.

(b) **All previous registrations and permits are superseded by this permit.**

6. The IDEM, OAQ has restructured C.18 to clarify the contents and implementation of the compliance response plan. The language regarding the OAQ's discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit. In C.18 (c)(2) "administrative amendment" has been revised to "minor permit modification", because 326 IAC 2-7-11(a)(7) has been repealed. The title Compliance Response Plan - Failure to Take Response Steps has been changed to Compliance Response Plan - Preparation, Implementation, Records, and Reports throughout the permit.

C.18 Compliance Response Plan - ~~Failure to Take Response Steps~~ Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so

long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for ~~an administrative amendment~~ **a minor permit modification** to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Paoli, Inc.
Source Location: 201 E. Martin Street, Orleans, IN 47452
County: Orange
SIC Code: 2521
Operation Permit No.: T117-6003-00014
Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Paoli, Inc. relating to the operation of a stationary source that manufactures and coats wood office furniture.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Surface Coating Operations

- (a) One (1) NGR #3 Booth, identified as F2A, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2A.
- (b) One (1) Topcoat #1 Booth, identified as F6A, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6A.
- (c) One (1) Topcoat #2 Booth, identified as F6B, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6B.
- (d) One (1) SAP #1 Booth, identified as F1, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F1.
- (e) One (1) SAP #3 Booth, identified as F12, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F12.
- (f) One (1) NGR #1 Booth, identified as F2, constructed in 1994, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F2.
- (g) One (1) Washcoat Booth, identified as F3, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F3.
- (h) One (1) Wipestain Booth, identified as F4, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F4.

- (l) One (1) Sealer Booth, identified as F5, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F5.
- (j) One (1) Topcoat #3 Booth, identified as F6, constructed in 1994, with a maximum capacity of 28.125 units per hour, emissions controlled by a dry filter, exhausting to stack F6.
- (k) One (1) Repair Booth, identified as F13, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F13.
- (l) One (1) SAP Booth, identified as F15, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F15.
- (m) One (1) NGR #1 Booth, identified as F16, constructed in 1994, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F16.
- (n) One (1) Repair Booth, identified as F10, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F10.
- (o) One (1) SAP/NGR #1 Booth, identified as F14, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F14.
- (p) One (1) Wipestain Booth, identified as F11, constructed in 1994, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F11.
- (q) One (1) Topcoat Booth, identified as F8, constructed in 1994, with a maximum capacity of 3.75 units per hour, emissions controlled by a dry filter, exhausting to stack F8.
- (r) One (1) Drawer Enamel Booth, identified as F9, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F9.
- (s) One (1) Drawer Coat Booth, identified as F7, constructed in 1994, with a maximum capacity of 37.5 units per hour, emissions controlled by a dry filter, exhausting to stack F7.
- (t) One (1) SAP #2 Booth, identified as F18, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack F18.
- (u) One (1) NGR #2 Booth, identified as G1, constructed in 1995, with a maximum capacity of 9.375 units per hour, emissions controlled by a dry filter, exhausting to stack G1.
- (v) One (1) Washcoat Booth, identified as F17, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F17.
- (w) One (1) Wipestain Booth, identified as F19, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F19.
- (x) One (1) Topcoat #1and #3 Booth, identified as F23, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F23.

- (y) One (1) Topcoat #2 and Sealer Booth, identified as F22, constructed in 1995, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F22.
- (z) One (1) SAP Booth, identified as F45, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F45.
- (aa) One (1) NGR Booth, identified as F46, constructed in 1998, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F46.
- (bb) One (1) Washcoat Booth, identified as F47, constructed in 1998, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F47.
- (cc) One (1) Topcoat and Sealer Booth, identified as F25, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F25.
- (dd) One (1) Repair Booth, identified as F24, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F24.
- (ee) One (1) SAP/NGR #1 Booth, identified as F20, constructed in 1995, with a maximum capacity of 3.125 units per hour, emissions controlled by a dry filter, exhausting to stack F20.
- (ff) One (1) Washcoat Booth, identified as F21, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F21.
- (gg) One (1) Topcoat and Sealer Booth, identified as C12, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack C12.
- (hh) One (1) Wipestain Booth, identified as F26, constructed in 1995, with a maximum capacity of 6.25 units per hour, emissions controlled by a dry filter, exhausting to stack F26.
- (ii) One (1) Repair Booth, identified as F44, constructed in 1997, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F44.
- (jj) One (1) SAP Booth, identified as C1, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C1.
- (kk) One (1) NGR Booth, identified as C2, constructed in 1995, with a maximum capacity of 67.5 units per hour, emissions controlled by a dry filter, exhausting to stack C2.
- (ll) One (1) SAP/NGR #1 Booth, identified as C3, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C3.
- (mm) One (1) SAP/NGR #3 Booth, identified as C10, constructed in 1995, with a maximum capacity of 10 units per hour, emissions controlled by a dry filter, exhausting to stack C10.
- (nn) One (1) Washcoat Booth, identified as C4, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C4.

- (oo) One (1) Wipestain Booth, identified as C5, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C5.
- (pp) One (1) Sealer #1 Booth, identified as C8, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C8.
- (qq) One (1) Topcoat #1 and Sealer #2 Booth, identified as C7, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C7.
- (rr) One (1) Topcoat #2 Booth, identified as C6, constructed in 1995, with a maximum capacity of 87.5 units per hour, emissions controlled by a dry filter, exhausting to stack C6.
- (ss) One (1) Repair Booth, identified as C9, constructed in 1995, with a maximum capacity of 9 units per hour, emissions controlled by a dry filter, exhausting to stack C9.
- (tt) One (1) Mix Booth, identified as C11, constructed in 1997, with a maximum capacity of 1 unit per hour, emissions controlled by a dry filter, exhausting to stack C11.
- (uu) One (1) Repair Booth, identified as F30, constructed in 1998, with a maximum capacity of 1.25 units per hour, emissions controlled by a dry filter, exhausting to stack F30.
- (vv) One (1) Wipestain Booth, identified as F27, constructed in 1999, with a maximum capacity of 7 units per hour, emissions controlled by a dry filter, exhausting to stack F27.
- (ww) One (1) Topcoat #1 and #3 Booth, identified as F29, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F29.
- (xx) One (1) Topcoat #2 and Sealer Booth, identified as F28, constructed in 1999, with a maximum capacity of 14 units per hour, emissions controlled by a dry filter, exhausting to stack F28.
- (yy) One (1) Robotic Spray Booth, identified as U1, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by water pans, exhausting to stack U1.
- (zz) One (1) Topcoat Booth, identified as U1A/U1B/U1C/U2, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by dry filters, exhausting to stacks U1A, U1B, U1C, or U2.
- (aaa) One (1) NGR Booth, identified as U3, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U3.
- (bbb) One (1) Sealer Booth, identified as U4, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U4.
- (ccc) One (1) Wipestain Booth, identified as U5, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U5.
- (ddd) One (1) Washcoat Booth, identified as U6, constructed in 1998, with a maximum capacity of 25 units per hour, emissions controlled by a dry filter, exhausting to stack U6.

Wood Milling and Assembly Operations

- (eee) One (1) Wood Milling Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC 4 and DC 6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.
- (fff) One (1) Furniture Assembly Process, identified as DC4/6, constructed in 1995, with a maximum capacity of 6,622.65 pounds per hour, emissions controlled by two baghouses, DC4 and DC6, each with an outlet grain loading of 0.008 gr/dscf and exhaust gas flow rate of 61,000 dscfm, exhausting to stacks 4 and 6.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Woodworking facilities, identified as DC7/8 and DC9/10, constructed in 1996, with a maximum capacity of 4,800 pounds per hour, with an air flow rate no greater than 125,000 cubic feet of air per minute and a grain loading no greater than 0.003 grains per dry standard cubic feet of outlet air, emissions controlled by two baghouses combination, exhausting to stack 7.
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: Thirty (30) 0.2 MMBtu/hr unit heaters, twenty (20) 0.5 MMBtu/hr ovens, and one (1) 3.6 MMBtu/hr boiler.
- (c) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations.
- (f) Other activities with particulate emissions equal to or less than 5 lb/hr or 25 lb/day: Woodworking operations and sawdust storage.
- (g) Activities with VOC emissions equal to or less than 3 lb/hour or 15 lb/day: Two (2) dip tanks with a total maximum capacity of 42.125 units per hour; one (1) test booth, identified as R&D1, constructed in 1998, with a maximum capacity of 12 oz. stain per 8 hour day.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 117-2932-00014, issued on February 12, 1994;
- (b) CP 117-2759-00014, issued on August 6, 1994;

- (c) CP 117-3577-00014, issued August 12, 1994 (revoked in 1995);
- (d) PSD construction permit, CP 117-4210-00014, issued on March 28, 1995 (included facilities previously permitted in CP 117-3577-00014;
- (e) CP 117-5122-00014, issued on August 27, 1996;
- (f) A 117-8514-00014, issued September 4, 1997 (amendment to CP 117-4210-00014);
- (g) CP 117-9309-00014, issued on March 19, 1998;
- (h) A 117-8544-00014, issued October 7, 1998 (amendment to CP 117-4210-00014); and
- (i) A 117-11633-00014, issued December 22, 1999 (amendment to CP 117-9309-00014);

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) CP 117-5122-00014, issued on August 26, 1996;

Condition 8(a), limiting the facilities U1, U1A/U1B/U1C/U2, U3, U4, U5, U6, U7, U8, and U9 to less than 3.24 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit of VOC, from these booths, to less than 39 tons per 12 consecutive month period.

Reason modified: This condition has been included in the Part 70 permit; however, the VOC usage limit applies to booths U1, U1A/U1B/U1C/U2, U3, U4, U5, and U6 because booths U7, U8, and U9 were never constructed.

Condition 8(b): "the Tellus Plant lines 1 and 2 made up of sixteen (16) spray booths (T1-16) shall not exceed 500 pounds per month."

Reason not incorporated: These booths were never constructed.

Condition 8(c): "the Tellus Line, Off Gun Line, Deskline 2 additions, Conference Table Line additions, Drawer Assembly Line additions, and Chair Line additions shall not exceed 0 tons per year."

Reason not incorporated: These booths were never constructed.

- (b) CP 117-4210-00014, issued on March 28, 1995;

Condition 7: "That pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions from the wood-fired boiler B1 shall be limited to 0.53 lb/MMBtu.

Reason not incorporated: The boiler was never constructed.

Conditions 4, 9, 10, and 11 requiring testing of, limiting emissions from, and requiring monitoring of, baghouse DC2.

Reason not incorporated: Baghouse DC2 was never constructed.

Condition 4: Performance testing requirements for baghouses DC4 and DC6.

Reason not incorporated: The Office of Air Quality (OAQ) received and reviewed an application from Paoli, Inc. for a permit revision to PSD permit, CP 117-4210-00014, as previously amended by A 117-8544-00014. The application requested removal of the stack testing requirement for two baghouse dust collectors on the woodworking

operations, identified as DC4 and DC6, and removal of references to a third baghouse that was never constructed, identified as DC2. The revision request was received on March 10, 1999. Additional supporting documentation was received on March 16, 2001. IDEM, OAQ decided to incorporate the revision into this Title V Part 70 permit instead of issuing a separate revision.

The baghouse specifications stated in the original construction permit application indicated that the maximum particulate matter (PM) emissions from the woodworking baghouses would exceed the allowable PM emissions pursuant to 326 IAC 6-3-2 (Process Operations). Based on the design outlet grain loadings and air flow rates stated in the original application, the potential PM emissions after control were originally estimated at 32.02 pounds per hour. Pursuant to 326 IAC 6-3, the allowable PM emission rate is 9.145 pounds per hour for a process weight rate of 6,622.65 pounds per hour.

As a result, the outlet grain loadings for baghouses DC4 and DC6 were each limited to 0.008 gr/dscf. These limits reduced each facility's PM potential to emit to 9.16 pounds per hour to achieve compliance with the allowable PM emission rate. Stack testing was required to demonstrate that the reduced outlet grain loadings were not being exceeded at the maximum production rate.

The source sought additional information from the baghouse manufacture and has now provided documentation that the manufacturer's stated control efficiency is sufficient to keep the woodworking PM emissions in compliance. Based on the permitted throughput, and a baghouse control efficiency of 99% (the manufacturer's specified removal efficiency is actually 99.9%+) the PM emissions after control are 6.623 pounds per hour. Therefore, stack testing of the woodworking baghouses is no longer believed to be needed.

The baghouse limits were also determined to be BACT for PM and PM10 in the PSD permit. Therefore, the exhaust air flow rates and grain loadings for DC4 and DC6 have been retained in the permit.

Removal of the stack test requirements have been approved by the OAQ Compliance Branch, provided that there is a condition that there are no visible emissions from the building openings. This requirement was already included in the original permit. Visible emission notations, quarterly inspection, and bag failure requirements have been added consistent with current compliance monitoring requirements for Title V woodworking sources.

(c) CP 117-9309-00014, issued on March 20, 1998;

Condition 11, limiting the PM emissions from the 3.6 MMBtu/hr boiler to less than 0.506 pounds per million Btu heat input.

Reason not incorporated: Pursuant to 326 IAC 6-2-4, a source with an total maximum indirect heat input capacity less than 10 MMBtu/hr, is limited to 0.6 lb/MMBtu; not by the equation listed in the rule from which the 0.506 lb/MMBtu limit was calculated.

Conditions 12, 13, and 14, limiting PM emissions from the Finish Sander, compliance requirements for the baghouse controlling emissions from the Finish Sander, and monitoring requirements from the Finish Sander's exhaust.

Reason not incorporated: The Finish Sander is no longer in operation as it has been removed from the source.

- (d) A 117-8544-00014, issued October 7, 1998 (amendment to CP 117-4210-00014)

Condition (b) stating that the pressure drop across the baghouses must be recorded once per shift instead of continuously as required per 117-4210-00017.

Reason not incorporated: The parametric monitoring requirement has been changed to require the monitoring of the pressure drop across the baghouses on the woodworking facilities at least once weekly to reflect, and be consistent with, current IDEM, OAQ guidance regarding such facilities.

Enforcement Issue

There are no enforcement actions pending.

Surface Coating Operation Summary

The following chart has been included to: identify each spray booth located at the source; indicate the process line to which it is a member; and, clarify which respective permit D section contains conditions applicable to the spray booth.

| Line/Booth # | Applicable Permit D Section |
|--------------------------------|-----------------------------|
| Deskline 1 | |
| F1 | D.2 |
| F18 | D.3 |
| F12 | D.2 |
| F2 | D.2 |
| G1 | D.3 |
| F2A | D.1 |
| F3 | D.2 |
| F4 | D.2 |
| F5 | D.2 |
| F6A | D.1 |
| F6B | D.1 |
| F6 | D.2 |
| F13 | D.2 |
| Deskline 2 | |
| F15 | D.2 |
| F16 | D.2 |
| F17 | D.3 |
| F19 | D.3 |
| F23 | D.3 |
| F22 | D.3 |
| F30 | D.4 |
| Deskline 1 and 2 repair | |
| F10 | D.2 |
| Deskline 3 | |
| F45 | D.3 |
| F46 | D.3 |
| F47 | D.3 |
| F27 | D.4 |
| F29 | D.4 |

| Line/Booth # | Applicable Permit D Section |
|--------------------------------|-----------------------------|
| F28 | D.4 |
| Deskline 4 | |
| F25 | D.3 |
| F24 | D.3 |
| Deskline 5 | |
| F14 | D.2 |
| F11 | D.2 |
| F8 | D.2 |
| Deskline 6 (Conference) | |
| F20 | D.3 |
| F21 | D.3 |
| F12 | D.2 |
| C12 | D.3 |
| F26 | D.3 |
| F44 | D.3 |
| Drawerline | |
| F9 | D.2 |
| F7 | D.2 |
| Chairline | |
| C1 | D.3 |
| C2 | D.3 |
| C3 | D.3 |
| C4 | D.3 |
| C5 | D.3 |
| C6 | D.3 |
| C7 | D.3 |
| C8 | D.3 |
| C9 | D.3 |
| C10 | D.3 |
| C11 | D.3 |
| UV Line | |
| U1A/U1B/U1C/U2 | D.5 |
| U4 | D.5 |
| U5 | D.5 |
| U6 | D.5 |

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application, previous permits, and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 31, 1996. Additional information was received on March 16, 2001 and April 24, 2001.

A notice of completeness letter was mailed to the source on March 3, 1997.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations, along with additional calculations completed by the reviewer, are provided in Appendix A of this document, pages 1 through 4.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 429 |
| PM-10 | 429 |
| SO ₂ | 0.1 |
| VOC | 2585 |
| CO | 17.7 |
| NO _x | 21.1 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAPs | Potential To Emit (tons/year) |
|---------------|-------------------------------|
| Xylene | 836.8 |
| Ethyl benzene | 191.9 |
| Toluene | 63.7 |
| Methanol | 59.1 |
| Formaldehyde | 6.9 |
| MEK | 3.0 |
| TOTAL | 1161.4 |

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

| Pollutant | Actual Emissions (tons/year) |
|-----------------|------------------------------|
| PM | not reported |
| PM-10 | not reported |
| SO ₂ | not reported |
| VOC | 274 |
| CO | not reported |
| NO _x | not reported |
| HAP (specify) | not specified |

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

| Process/Facility | Limited Potential to Emit (tons/year) | | | | | | |
|---|--|-------------|-----------------|--------------|------------|-----------------|---------------|
| | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Spray booths F2A, F6A, and F6B | 0.88 | 0.88 | 0 | 240 | 0 | 0 | (c) |
| Spray booths F1 - F16 | 4.69 | 4.69 | 0 | 240 | 0 | 0 | (c) |
| Spray booths F17 - F26, F44 - F47, G1, C1 - C12 | 7.91 | 7.91 | 0 | 445 | 0 | 0 | (c) |
| Spray booths F27, F28, F29, and F30 | 1.17 | 1.17 | 0 | 34.32 | 0 | 0 | (c) |
| Spray booths U1A/U1B/U1C/U2, U4, U5, and U6 | 1.17 | 1.17 | 0 | 38.88 | 0 | 0 | (c) |
| Wood Milling ^a | 18.3 | 18.3 | 0 | 0 | 0 | 0 | 0 |
| Furniture Assembly ^a | 18.3 | 18.3 | 0 | 0 | 0 | 0 | 0 |
| Woodworking ^b | 25.0 | 15.0 | 0 | 0 | 0 | 0 | 0 |
| Insignificant activities | 0.7 | 0.7 | 0.1 | 0.5 | 7.2 | 8.6 | 0 |
| Total Emissions | 78.4 | 68.4 | 0.1 | 998.7 | 7.2 | 8.6 | 1161.4 |

- a- Pursuant to 326 IAC 6-3-2, the allowable PM emissions from each of these facilities is limited to 9.14 lb/hr. The limited potential to emit PM and PM10 from the Wood Milling and Furniture Assembly Processes is based on the baghouses' limited outlet grain loadings and exhaust flow rates of 0.008 gr/dscf and 61,000 dscfm, respectively. These limitations are required to satisfy the requirements of 326 IAC 2-2.
- b- Pursuant to 326 IAC 2-7-1(21)(g)(xxix) (Baghouse Limitations), emissions from the woodworking operations are limited to 0.003 gr/dscf and 125,000 acfm. Compliance with this rule will satisfy the requirements of 326 IAC 6-3-2 and render the requirements of 326 IAC 2-2 not applicable.
- c- The limited HAP emissions for all surface coating booths is equal to 1161.4 tons per year. This limited potential to emit reflects the potential to emit of the booths using 40 CFR 63 Subpart JJ compliant coatings.

County Attainment Status

The source is located in Orange County.

| Pollutant | Status |
|-----------------|------------|
| PM-10 | attainment |
| SO ₂ | attainment |
| NO ₂ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | attainment |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Orange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Orange County has been classified as attainment or unclassifiable for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The wood furniture coating operations are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 60 Subpart JJ). Pursuant to 40 CFR 63.800, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids, as applied; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of

one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

- (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use any combination of (A), (B), and (C).
- (2) Limit VHAP emissions from contact adhesives as follows:
- (A) Use compliant contact adhesives as follows:
 - (i) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids;
 - (ii) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids;
 - or
 - (B) Use a control device to limit emissions to one (1.0) for existing pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.

Pursuant to 40 CFR 63.803, the owner or operator of an affected source subject to this subpart shall maintain a written work practice implementation plan. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

- (a) Operator training course.
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and washoff solvent accounting system.
- (d) Chemical composition of cleaning and washoff solvents.
- (e) Spray booth cleaning.
- (f) Storage requirements.
- (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (h) Line cleaning.
- (i) Gun cleaning.
- (j) Washoff operations.
- (k) Formulation assessment plan for finishing operations.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart JJ.

- (c) This source is not subject to the provisions of 40 CFR 64, Compliance Assurance Monitoring. In order for this rule to apply, a specific emissions unit must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and, 3) the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the amount required for a source to be classified as a major source. For this source, the Wood Milling and Furniture Assembly operations have an uncontrolled potential to emit particulate matter greater than 100 tons per year and use baghouses to comply with established PM limits. However, the original part 70 permit application was submitted prior to April 20, 1998; pursuant to 40 CFR 64.5, the source is not subject to the rule until such time this permit must be renewed. Therefore, 40 CFR 64 is not applicable to the source.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

This source is not subject to the requirements of 326 IAC 2-4.1-1 because the source was constructed before July 27, 1997.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Surface Coating Operations

326 IAC 2-2 (Prevention of Significant Deterioration)

Paoli applied for their first of three construction permits in August of 1992. Upon review of the application, it was determined that the source had operated without a permit for four years. The resulting CWOP case was settled in mid-1993, and OAQ issued permit 117-2932-00014. Pursuant to 117-2932-00014, issued January 12, 1994, the Deskline 1 spray booths: F2A, F6A, and F6B were limited to less than twenty (20) tons of VOC per month (240 tons per twelve (12) consecutive month period), in aggregate. Upon issuance of this permit, Paoli became was classified as a PSD Minor source not requiring PSD review.

A second construction permit, 117-2759-00014, was issued August 6, 1994, in which the Deskline 1 booths: F1, F2, F3, F4, F5, F6, F12, and F13, Deskline 1&2 Repair booth: F10, Deskline 2 booths: F15 and F16, Deskline 5 booths: F8, F11, F14, and Drawerline booths: F7 and F9 were limited to less than 20 tons of VOC per month (240 tons per twelve (12) consecutive month period), in aggregate. Since this modification to a PSD minor source was less than 250 tpy, this modification was not subject to PSD review. Upon issuance of this permit, however, Paoli became a major source for the purposes of PSD review.

A third construction permit, 117-3577-00014, issued August 12, 1994 (revoked in 1995), was not reviewed correctly. This permit, incorrectly limited the new units to 240 tpy VOC. The significant level, for a then major source, was 40 tpy for VOC. Thus, the 40 tpy limit was invalid because the permit did not undergo PSD review. Therefore, to correct and satisfy the permitting requirements, 117-3577-00014 was revoked and the facilities permitted under 117-3577-00014 were included with the PSD permit, 117-4210-00014.

A PSD Permit, 117-4210-00014, was issued March 28, 1995. The BACT determination from this permit limited the VOC usage of spray booths F17 through F26, F44 through F47, G1, and C1 through C12, to less than 37 tons of VOC per month (less than 445 tons calculated on a twelve month average rolled on a monthly basis), in aggregate. This limit reduced the VOC emissions to a rate corresponding to the actual hours of operation.

Pursuant to 117-5122-00014, issued August 27, 1996, spray booths F27, F28, F29, and F30, were limited, in aggregate, to less than 2.86 tons VOC per month, Tellus Plant booths were limited to 500 pounds VOC per month, and several other booths were limited to zero tons per year. The sum of these limits equaled 37.3 tons VOC per year. Compliance with this limit rendered the requirements of PSD not applicable. Only spray booths F27, F28, F29, and F30 were constructed.

Pursuant to 117-9309-00014, issued on March 20, 1998, the UV line booths, U1A/U1B/U1C/U2, U4, U5, and U6, were limited to less than 3.24 tons of VOC per month (less than 39 tons per 12 consecutive month period), in aggregate. Compliance with this limit rendered the requirements of PSD not applicable.

Compliance with these limits have and will satisfy the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21.

BACT Conditions

Pursuant to CP 117-4210-00014, issued on March 28, 1995, and 326 IAC 2-2-3(a), spray booths: F17 through F26, inclusive, F44 through F47, inclusive, G1, and C1 through C12, inclusive, shall use:

- (a) less than thirty-seven (37) tons of VOC, including coatings, dilution solvents, and cleaning solvents, per month. This limit is equivalent to less than four hundred and forty-five (445) tons VOC, calculated on a twelve month average rolled on a monthly basis. This usage limit is based upon actual hours of operation and has been determined to serve as the BACT for this source;
- (b) dry filters for overspray control; and
- (c) HVLP spray application methods.

In addition, the following pollution prevention techniques shall be applied:

1. the cleanup solvents shall be stored in closed containers with soft gasketed spring-loaded closures,

2. the cleanup rags saturated with solvent be stored, transported, and disposed of in containers that are closed tightly, and
3. the spray guns used are the type that can be cleaned without the need for spraying the solvent into the air.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), all surface coating operations (facilities G1, F2A, F6A, F6B, F1 through F30, F44 through F47, C1 through C12, U1, U1A/U1B/U1C/U2, U3, U4, U5, and U6) located at Paoli, Inc. shall utilize one of the following application methods:

Airless Spray Application

Air Assisted Airless Spray Application

Electrostatic Spray Application

Electrostatic Bell or Disc Application

Heated Airless Spray Application

Roller Coating

Brush or Wipe Application

Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

326 IAC 8-11 (Wood Furniture Coatings)

Pursuant to 326 IAC 8-11-1, this source is not subject to the requirements of 326 IAC 8-11 because the source is located in Orange County.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each of the surface coating operations shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times these facilities are in operation, in order to comply with this limit.

State Rule Applicability - Wood Milling and Furniture Assembly Operations

326 IAC 2-2 (Prevention of Significant Deterioration) and BACT Conditions

Pursuant to CP 117-4210-00014, issued on March 28, 1995, the baghouse/cyclone combinations have been determined to be BACT for the wood milling and assembly processes. The allowable outlet grain loadings from baghouses DC4 and DC6 are 0.008 and 0.008

grains/dry standard cubic foot (gr/dscf) with the input flow rates not to exceed 61,000 and 61,000 dry standard cubic feet per minute (dscfm), respectively.

The equivalent allowable particulate matter (PM) emissions from the Wood Milling and Furniture Assembly operations are 18.3 tons per year, each.

326 IAC 6-3-2 (Process Operations)

Pursuant to CP 117-4210-00014, issued on March 28, 1995, and 326 IAC 6-3-2, the particulate matter (PM) emissions from the Wood Milling and Furniture Assembly operations shall not exceed 9.14 pounds per hour when operating at a process weight rate of 6,622.65 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times these facilities are in operation, in order to comply with this limit.

State Rule Applicability - Insignificant Woodworking Operations

326 IAC 2-7-1(21)(G)(xxix) (Baghouse Limitations)

The woodworking operations controlled by a baghouse shall be an insignificant activity for Title V permitting purposes provided that the baghouse operations meet the requirements of 326 IAC 2-7-1(21)(G)(xxix), including the following:

- (a) Each woodworking baghouse shall not exhaust to the atmosphere greater than one hundred twenty-five thousand (125,000) cubic feet of air per minute and shall not emit particulate matter with a diameter less than ten (10) microns in excess of three-thousandths (0.003) grain per dry standard cubic foot of outlet air.
- (b) The opacity from each baghouse shall not exceed ten percent (10%).
- (c) Visible emissions from the baghouse shall be observed daily using procedures in accordance with Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:
 - (1) The baghouse shall be inspected.
 - (2) Corrective actions, such as replacing or reseating bags, are initiated, when necessary.

326 IAC 6-3-2 (Process Operations)

Pursuant to CP 117-4210-00014, issued March 28, 1995, and 326 IAC 6-3-2, the particulate matter (PM) emissions from the insignificant woodworking operations shall not exceed 7.37 pounds per hour when operating at a process weight rate of 4,800 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times these facilities are in operation, in order to comply with this limit.

State Rule Applicability - 3.6 MMBtu/hr Boiler

326 IAC 6-2-4 (Sources of Indirect Heating)

Pursuant to CP 117-9309-00014, issued on March 20, 1998 and pursuant to 326 IAC 6-2-4, the PM emissions from the 3.6 MMBtu/hr natural gas-fired boiler shall not exceed 0.6 pounds per million BTU heat input.

Testing Requirements

The Permittee is not required to perform compliance stack tests on the surface coating facilities because there are no VOC control devices in operation and records must be kept of all VOCs used at the source.

The Permittee is not required to perform compliance stack tests for the woodworking baghouses DC4 and DC6, or baghouse/cyclone combination DC7/8, by this permit (see Existing Approvals section). Removal of the original stack test requirements have been approved by the OAQ Compliance Data Section, provided that there is a condition that there are no visible emissions from the building openings. This requirement was included in the original permit (117-4210-00014). Visible emission notations, quarterly inspection, and bag failure requirements have been added consistent with current compliance monitoring requirements for Title V woodworking sources. Note, however, that IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in section D.6 of the permit shall be determined by a performance test conducted in accordance with 326 IAC 3-6 (Source Sampling Procedures).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The surface coating operations have applicable compliance monitoring conditions as specified below:

The permittee shall implement an operator training program.

- (a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the

particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.

- (b) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (c) All operators shall be given refresher training annually.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the spray coating operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

- 2. The Wood Milling and Furniture Assembly operations have applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the Wood Milling and Furniture Assembly operations exhausts shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) The Permittee shall record the total static pressure drop across the baghouses controlling the Wood Milling and Furniture Assembly operations at least once weekly when these facilities are exhausting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses for the Wood Milling and Furniture Assembly operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), BACT, and 326 IAC 2-7 (Part 70).

- 3. The Woodworking operations have the following applicable compliance monitoring conditions as specified below:

Visible emissions from the baghouse shall be observed daily using procedures in accordance with Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:

- (1) The baghouse shall be inspected.
- (2) Corrective actions, such as replacing or reseating bags, are initiated, when necessary.

This monitoring condition is necessary to ensure compliance with 326 IAC 2-7-1(21)(G)(xxix) and 326 IAC 6-3-2 (Process Operations).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the 1990 Clean Air Act. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act.
- (b) See attached calculations for detailed air toxic calculations. (p.4 of Appendix A)

Conclusion

The operation of this stationary wood office furniture manufacturing and coating source shall be subject to the conditions of the attached proposed Part 70 Permit No. T117-6003-00014.

Appendix A: Emissions Calculations
PM/PM10 Emissions from Woodworking operations

Page 1 of 18 TSD App A

Company Name: Paoli, Inc.
Address City IN Zip: 201 E. Martin Street, Orleans, IN 47452
Part 70 permit: 117-6003-00014
Reviewer: ERG/BS
Date: 04.26.01

| Unit ID | Maximum Process Throughput (lb/hr) | Emission Factor (lb/hr) | | Uncontrolled Potential to Emit (lb PM/hr) | Uncontrolled Potential to Emit (ton PM/yr) | Control Efficiency (%) | Controlled Potential to Emit (ton PM/yr) |
|------------------------|------------------------------------|-------------------------|---|---|--|------------------------|--|
| Woodworking Operations | 4,800 | 19.13 | a | 19.15 | 83.87 | 99.9 | 0.08 |

| Unit ID | Baghouse Outlet Grain Loading (gr/dscf) | Flow Rate (dscf/min) | | Uncontrolled Potential to Emit (lb PM/hr) | Uncontrolled Potential to Emit (ton PM/yr) | Control Efficiency (%) | Controlled Potential to Emit (ton PM/yr) |
|-------------------------------|---|----------------------|--|---|--|------------------------|--|
| Wood Milling Operations | 0.008 | 61,000 | | na | na | na | 18.3 |
| Furniture Assembly Operations | 0.008 | 61,000 | | na | na | na | 18.3 |

a- This emission factor was provided by the source as the amount of sawdust collected (lb/hr).

Note: For the purpose of this review, PM10 is assumed to be equal to PM.

na- Not Applicable

TOTAL 36.7

METHODOLOGY

Woodworking Operations:

Uncontrolled Emissions (tons/yr)= Sawdust collected (lb/hr)/(control efficiency/100)

Controlled Emissions (tons/yr)= [Uncontrolled Emissions (lb/hr) - sawdust collected (lb/hr)] x 8760 hr/yr x 1/2000 ton/lb

Milling and Assembly Operations:

Controlled PM Emissions (ton/yr) = grain loading (gr/dscf) x flow rate (dscf/min) x 1lb/7000 grains x 60 min/hr x 8760 hr/yr x 1/2000 ton/lb

Page 2 of 18 TSD App A

Company Name: Paoli, Inc.
Address City IN Zip: 201 E. Martin Street, Orleans, IN 47452
Part 70 permit: 117-6003-00014
Reviewer: ERG/BS
Date: 04.26.01

| Aggregate Heat Input Capacity (all units) | Potential Throughput |
|---|----------------------|
| MMBtu/hr | MMCF/yr |

19.6

171.7

| Pollutant | | | | | | |
|--|-----|-------|-----|-------------|-----|------|
| Emission Factor in lb/MMCF | PM* | PM10* | SO2 | NOx | VOC | CO |
| | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr (for 64 ovens) | 0.7 | 0.7 | 0.1 | 8.6 | 0.5 | 7.2 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

$$\text{MMBtu} = 1,000,000 \text{ Btu}$$

MMCF = 1,000,000 Cubic Feet of Gas

$$\text{Potential Throughput (MMCF)} = \text{Heat Input Capacity (MMBtu/hr)} \times 8,760 \text{ hrs/yr} \times 1 \text{ MMCF}/1,000 \text{ MMBtu}$$

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

$$\text{Emission (tons/yr)} = \text{Throughput (MMCF/yr)} \times \text{Emission Factor (lb/MMCF)} / 2,000 \text{ lb/ton}$$

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 5 for HAPs emissions calculations.

gasc99.wk4 9/95
updated 4/99

Company Name: Paoli, Inc. Paoli Inc.
Plant Location: 201 E. Martin Street, Or Orleans, Indiana
County: Orange Orange
Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 2,579.90 |
| Total controlled PM PTE: | 16.13 |
| Total HAP PTE: | 1,161.25 |

INDICATE THE MATERIAL YOU ARE COATING: Wood

| INDICATE THE MATERIAL YOU ARE COATING: WOOD | | | | | | | | | | | | | |
|---|--------------------|-----------------|--------------------------|----------------------|-------------|----------------|-----------------|-------------|----------|--------------|----------|----------|----------------|
| MATERIAL NAME | MATERIAL ID NUMBER | DENSITY LBS/GAL | WEIGHT % TOTAL VOLATILES | WGT % ORGANICS (VOC) | WGT % WATER | VOLUME % WATER | VOLUME % SOLIDS | FLASH OFF % | GAL/UNIT | MAX UNITS/HR | STACK ID | PERMIT # | DATE INSTALLED |
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F1 | 2759 | Oct-94 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001322 | 9.375 | F1 | 2759 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000808 | 9.375 | F1 | 2759 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000721 | 9.375 | F1 | 2759 | |
| SAP BOOTH #2 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F18 | 4210 | Jun-95 |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000808 | 9.375 | F18 | 4210 | |
| SAP BOOTH #3 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F12 | 2759 | Oct-94 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001322 | 9.375 | F12 | 2759 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000808 | 9.375 | F12 | 2759 | |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.045078 | 9.375 | F2 | 2759 | Oct-94 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.003141 | 9.375 | F2 | 2759 | |
| Fast NGR Base | 506-X65VT-514 | 6.59 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000003 | 9.375 | F2 | 2759 | |
| NGR BOOTH #2 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.045078 | 9.375 | G1 | 4210 | Mar-95 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.003141 | 9.375 | G1 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000808 | 9.375 | G1 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000721 | 9.375 | G1 | 4210 | |
| NGR BOOTH #3 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.045078 | 9.375 | F2A | 2932 | Aug-94 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.003141 | 9.375 | F2A | 2932 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000808 | 9.375 | F2A | 2932 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000721 | 9.375 | F2A | 2932 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.054547 | 28.125 | F3 | 2759 | Oct-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00224 | 28.125 | F3 | 2759 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.026778 | 28.125 | F4 | 2759 | Oct-94 |
| #28 New Congress No-Wipe Stain | 548-D5V-2811 | 6.49 | 98.58% | 98.58% | 0.00% | 0.00% | 0.84% | 100.00% | 0.007510 | 28.125 | F4 | 2759 | |
| #35 Trad. Walnut Filler | 912-D1-346A | 13.33 | 16.97% | 16.97% | 0.00% | 0.00% | 65.53% | 100.00% | 0.004589 | 28.125 | F4 | 2759 | |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.036200 | 28.125 | F5 | 2759 | Oct-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00149 | 28.125 | F5 | 2759 | |
| TOPCOAT BOOTH #1 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 28.125 | F6A | 2932 | Aug-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 28.125 | F6A | 2932 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 28.125 | F6A | 2932 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 28.125 | F6A | 2932 | |
| Fish Eye Eliminator | 50-C1-613A | 7.27 | 97.28% | 97.28% | 0.00% | 0.00% | 2.45% | 100.00% | 0.000054 | 28.125 | F6A | 2932 | |
| TOPCOAT BOOTH #2 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 28.125 | F6B | 2932 | Aug-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 28.125 | F6B | 2932 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 28.125 | F6B | 2932 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 28.125 | F6B | 2932 | |
| Fish Eye Eliminator | 50-C1-613A | 7.27 | 97.28% | 97.28% | 0.00% | 0.00% | 2.45% | 100.00% | 0.000054 | 28.125 | F6B | 2932 | |
| TOPCOAT BOOTH #3 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 28.125 | F6 | 2759 | Oct-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 28.125 | F6 | 2759 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 28.125 | F6 | 2759 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 28.125 | F6 | 2759 | |
| Fish Eye Eliminator | 50-C1-613A | 7.27 | 97.28% | 97.28% | 0.00% | 0.00% | 2.45% | 100.00% | 0.000054 | 28.125 | F6 | 2759 | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | 6.83 | 96.94% | 96.94% | 0.00% | 0.00% | 1.83% | 100.00% | 0.00900 | 3.750 | F13 | 2759 | Oct-94 |
| DESKLINE 1 and 2 | | | | | | | | | | | | | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.00900 | 6.250 | F10 | 2759 | Oct-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00037 | 6.250 | F10 | 2759 | |
| DESKLINE 2 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.102513 | 14.000 | F15 | 2759 | Oct-94 |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.002425 | 14.000 | F15 | 2759 | |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.067617 | 14.000 | F16 | 2759 | Oct-94 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.004711 | 14.000 | F16 | 2759 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.001213 | 14.000 | F16 | 2759 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.001082 | 14.000 | F16 | 2759 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.054547 | 14.000 | F17 | 4210 | Mar-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00224 | 14.000 | F17 | 4210 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc. Paoli Inc.
Plant Location: 201 E. Martin Street, Ori Orleans, Indiana
County: Orange Orange
Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 2,579.90 |
| Total controlled PM PTE: | 16.13 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| MATERIAL NAME | MATERIAL ID NUMBER | DENSITY LBS/GAL | WEIGHT % TOTAL VOLATILES | WGT % ORGANICS (VOC) | WGT % WATER | VOLUME % WATER | VOLUME % SOLIDS | FLASH OFF % | GAL/UNIT | MAX UNITS/HR | STACK ID | PERMIT # | DATE INSTALLED |
|------------------------------------|--------------------|-----------------|--------------------------|----------------------|-------------|----------------|-----------------|-------------|----------|--------------|----------|----------|----------------|
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F1 | 2759 | Oct-94 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001322 | 9.375 | F1 | 2759 | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.026778 | 14.000 | F19 | 4210 | Mar-95 |
| #28 New Congress No-Wipe Stain | 548-D5V-2811 | 6.49 | 98.58% | 98.58% | 0.00% | 0.00% | 0.84% | 100.00% | 0.007510 | 14.000 | F19 | 4210 | |
| #35 Trad. Walnut Filler | 912-D1-346A | 13.33 | 16.97% | 16.97% | 0.00% | 0.00% | 65.53% | 100.00% | 0.004589 | 14.000 | F19 | 4210 | |
| TOPCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 14.000 | F23 | 4210 | Mar-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 14.000 | F23 | 4210 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 14.000 | F23 | 4210 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 14.000 | F23 | 4210 | |
| TOPCOAT #2 AND SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 14.000 | F22 | 4210 | Mar-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 14.000 | F22 | 4210 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 14.000 | F22 | 4210 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 14.000 | F22 | 4210 | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.362000 | 14.000 | F22 | 4210 | |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01488 | 14.000 | F22 | 4210 | |
| REPAIR | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 1.250 | F30 | 5122 | Jul-98 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 1.250 | F30 | 5122 | |
| DESKLINE 3 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.102513 | 14.000 | F45 | 4210 | Aug-98 |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.002425 | 14.000 | F45 | 4210 | |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.067617 | 7.000 | F46 | 4210 | Dec-98 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.004711 | 7.000 | F46 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.001213 | 7.000 | F46 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.001082 | 7.000 | F46 | 4210 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.054547 | 14.000 | F47 | 4210 | Dec-98 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00224 | 14.000 | F47 | 4210 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #08 Lt. Cherry Fill Glaze | 920-D5-3593 | 7.33 | 74.93% | 74.93% | 0.00% | 0.00% | 15.29% | 100.00% | 0.005049 | 7.000 | F27 | 5122 | Jun-99 |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.026778 | 7.000 | F27 | 5122 | |
| #35 Trad. Walnut Filler | 912-D1-346A | 13.33 | 16.97% | 16.97% | 0.00% | 0.00% | 65.53% | 100.00% | 0.004589 | 7.000 | F27 | 5122 | |
| TOPCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 14.000 | F29 | 5122 | Jun-99 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 14.000 | F29 | 5122 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 14.000 | F29 | 5122 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 14.000 | F29 | 5122 | |
| TOPCOAT #2 and SEALER | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 14.000 | F28 | 5122 | Jun-99 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 14.000 | F28 | 5122 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 14.000 | F28 | 5122 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 14.000 | F28 | 5122 | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.362000 | 14.000 | F28 | 5122 | |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01488 | 14.000 | F28 | 5122 | |
| DESKLINE 4 | | | | | | | | | | | | | |
| TOPCOAT and SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 6.250 | F25 | 4210 | Mar-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 6.250 | F25 | 4210 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 6.250 | F25 | 4210 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 6.250 | F25 | 4210 | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.036200 | 6.250 | F25 | 4210 | |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00149 | 6.250 | F25 | 4210 | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 6.250 | F24 | 4210 | Mar-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 6.250 | F24 | 4210 | |
| DESKLINE 5 | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.102513 | 6.250 | F14 | 2759 | Oct-94 |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.135233 | 6.250 | F14 | 2759 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #28 New Congress No-Wipe Stain | 548-D5V-2811 | 6.49 | 98.58% | 98.58% | 0.00% | 0.00% | 0.84% | 100.00% | 0.007510 | 6.250 | F11 | 2759 | Oct-94 |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 3.750 | F8 | 2759 | Oct-94 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 3.750 | F8 | 2759 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.007483 | 3.750 | F8 | 2759 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002479 | 3.750 | F8 | 2759 | |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc. Paoli Inc.
Plant Location: 201 E. Martin Street, Ori Orleans, Indiana
County: Orange Orange
Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 2,579.90 |
| Total controlled PM PTE: | 16.13 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture
INDICATE THE MATERIAL YOU ARE COATING: Wood

| MATERIAL NAME | MATERIAL ID NUMBER | DENSITY LBS/GAL | WEIGHT % TOTAL VOLATILES | WGT % ORGANICS (VOC) | WGT % WATER | VOLUME % WATER | VOLUME % SOLIDS | FLASH OFF % | GAL/UNIT | MAX UNITS/HR | STACK ID | PERMIT # | DATE INSTALLED |
|---------------------------------------|--------------------|-----------------|--------------------------|----------------------|-------------|----------------|-----------------|-------------|----------|--------------|----------|----------|----------------|
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F1 | 2759 | Oct-94 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001322 | 9.375 | F1 | 2759 | |
| DESKLINE 6 (CONFERENCE) | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.051257 | 3.125 | F20 | 4210 | Jun-95 |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.067617 | 3.125 | F20 | 4210 | |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.004711 | 3.125 | F20 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.001213 | 3.125 | F20 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.001082 | 3.125 | F20 | 4210 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.054547 | 6.250 | F21 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00224 | 6.250 | F21 | 4210 | |
| TOPCOAT and SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.327826 | 6.250 | C12 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.01347 | 6.250 | C12 | 4210 | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.036200 | 6.250 | C12 | 4210 | |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00149 | 6.250 | C12 | 4210 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.026778 | 6.250 | F26 | 4210 | Jun-95 |
| #28 New Congress No-Wipe Stain | 548-D5V-2811 | 6.49 | 98.58% | 98.58% | 0.00% | 0.00% | 0.84% | 100.00% | 0.007510 | 6.250 | F26 | 4210 | |
| #35 Trad. Walnut Filler | 912-D1-346A | 13.33 | 16.97% | 16.97% | 0.00% | 0.00% | 65.53% | 100.00% | 0.004589 | 6.250 | F26 | 4210 | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | 6.83 | 96.94% | 96.94% | 0.00% | 0.00% | 1.83% | 100.00% | 0.002840 | 1.250 | F44 | 4210 | Sep-97 |
| DRAWER LINE | | | | | | | | | | | | | |
| DRAWER ENAMEL BOOTH | | | | | | | | | | | | | |
| Walnut Edge Filler | 450-D1-1846A | 9.16 | 51.74% | 51.74% | 0.00% | 0.00% | 27.35% | 100.00% | 0.003426 | 37.500 | F9 | 2759 | Oct-94 |
| DRAWER COAT BOOTH | | | | | | | | | | | | | |
| Tinted Drawer Coating | 205-D5-134 | 7.97 | 54.70% | 54.70% | 0.00% | 0.00% | 35.89% | 100.00% | 0.030249 | 37.500 | F7 | 2759 | Oct-94 |
| CHAIRLINE | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.024227 | 67.500 | C1 | 4210 | Jun-95 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000938 | 67.500 | C1 | 4210 | |
| New Vinyl Stain Base | 50-X5V-8031 | 6.80 | 99.49% | 99.49% | 0.00% | 0.00% | 0.31% | 100.00% | 0.00000 | 67.500 | C1 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000511 | 67.500 | C1 | 4210 | |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.031960 | 67.500 | C2 | 4210 | Jun-95 |
| Stain Reducer | 201-RM1-400 | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.002227 | 67.500 | C2 | 4210 | |
| VROH Vinyl Clear | 370-L5W-1523 | 7.50 | 74.56% | 74.56% | 0.00% | 0.00% | 16.82% | 100.00% | 0.000002 | 67.500 | C2 | 4210 | |
| VHC Binder | 506-C5-152 | 7.39 | 79.57% | 79.57% | 0.00% | 0.00% | 13.11% | 100.00% | 0.000006 | 67.500 | C2 | 4210 | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.012114 | 10.000 | C3 | 4210 | Jun-95 |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.015980 | 10.000 | C3 | 4210 | |
| VHC Stain Reducer | 506-X5-151A | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000703 | 10.000 | C3 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000287 | 10.000 | C3 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000256 | 10.000 | C3 | 4210 | |
| Equalizer | 360-Y5-359 | 7.10 | 95.00% | 94.99% | 0.01% | 0.01% | 1.76% | 100.00% | 0.003138 | 10.000 | C3 | 4210 | |
| SAP/NGR BOOTH #3 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.012114 | 10.000 | C10 | 4210 | Jun-95 |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.015980 | 10.000 | C10 | 4210 | |
| VHC Stain Reducer | 506-X5-151A | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000703 | 10.000 | C10 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000287 | 10.000 | C10 | 4210 | |
| White Wash Toner | 373-E5V-2140A | 7.42 | 87.22% | 87.12% | 0.10% | 0.09% | 5.41% | 100.00% | 0.000256 | 10.000 | C10 | 4210 | |
| Equalizer | 360-Y5-359 | 7.10 | 95.00% | 94.99% | 0.01% | 0.01% | 1.76% | 100.00% | 0.003138 | 10.000 | C10 | 4210 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.012891 | 87.500 | C4 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00005 | 87.500 | C4 | 4210 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.006308 | 87.500 | C5 | 4210 | Jun-95 |
| #28 New Congress No-Wipe Stain | 548-D5V-2811 | 6.49 | 98.58% | 98.58% | 0.00% | 0.00% | 0.84% | 100.00% | 0.001775 | 87.500 | C5 | 4210 | |
| Inert Mono Glaze | 543-L1-7 | 8.28 | 55.90% | 55.90% | 0.00% | 0.00% | 28.66% | 100.00% | 0.000447 | 87.500 | C5 | 4210 | |
| Glaze | 548-D1-2525A | 7.81 | 59.30% | 59.30% | 0.00% | 0.00% | 28.55% | 100.00% | 0.000469 | 87.500 | C5 | 4210 | |
| SEALER #1 BOOTH | | | | | | | | | | | | | |
| Sealer Low Haps | 831-FL5-74 | 7.76 | 70.83% | 70.83% | 0.00% | 0.00% | 22.33% | 100.00% | 0.004922 | 87.500 | C8 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00002 | 87.500 | C8 | 4210 | |
| TOPCOAT #1 and SEALER #2 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.077476 | 87.500 | C7 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00032 | 87.500 | C7 | 4210 | |
| Rel-Plaz Reducer | 480-X5V3-1666 | 6.86 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001769 | 87.500 | C7 | 4210 | |
| Retarder | 250-RM1-308A | 6.82 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000586 | 87.500 | C7 | 4210 | |
| Glide Additive | 50-C5-7796 | 7.82 | 48.00% | 48.00% | 0.00% | 0.00% | 46.50% | 100.00% | 0.00000 | 87.500 | C7 | 4210 | |
| Sealer Low Haps | 831-FL5-74 | 7.76 | 70.83% | 70.83% | 0.00% | 0.00% | 22.33% | 100.00% | 0.004922 | 87.500 | C7 | 4210 | |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00002 | 87.500 | C7 | 4210 | |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc.

Paoli Inc.

Plant Location: 201 E. Martin Street, Ori Orleans, Indiana

County: Orange

Orange

Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 2,579.90 |
| Total controlled PM PTE: | 16.13 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| MATERIAL NAME | MATERIAL ID NUMBER | DENSITY LBS/GAL | WEIGHT % TOTAL VOLATILES | WGT % ORGANICS (VOC) | WGT % WATER | VOLUME % WATER | VOLUME % SOLIDS | FLASH OFF % | GAL/UNIT | MAX UNITS/HR | STACK ID | PERMIT # | DATE INSTALLED |
|-------------------------------|--------------------|-----------------|--------------------------|----------------------|-------------|----------------|-----------------|-------------|----------|--------------|-------------|----------|----------------|
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.034171 | 9.375 | F1 | 2759 | Oct-94 |
| Naptha | 920-X5-3848 | 6.32 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.001322 | 9.375 | F1 | 2759 | |
| TOPCOAT #2 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.077476 | 87.500 | C6 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00032 | 87.500 | C6 | 4210 | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 7.83 | 65.75% | 65.75% | 0.00% | 0.00% | 26.50% | 100.00% | 0.007971 | 9.000 | C9 | 4210 | Jun-95 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00003 | 9.000 | C9 | 4210 | |
| Mineral Spirits Stain Reducer | 201-RM1-302 | 6.48 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000595 | 9.000 | C9 | 4210 | |
| MIX BOOTH | | | | | | | | | | | | | |
| Laquer Thinner | 480-X5VT-1569A | 6.75 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000121 | 1.000 | C11 | 4210 | Jul-97 |
| VHC Stain Reducer | 506-X5-151A | 6.54 | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.000016 | 1.000 | C11 | 4210 | |
| White Vinyl Paste | 50-W1-496 | 11.25 | 44.01% | 43.52% | 0.49% | 0.66% | 26.30% | 100.00% | 0.000000 | 1.000 | C11 | 4210 | |
| #45 Walnut Shade | 371-D1-859 | 6.83 | 96.94% | 96.94% | 0.00% | 0.00% | 1.83% | 100.00% | 0.000008 | 1.000 | C11 | 4210 | |
| VHC Yellow Concentrate | 96-Y5V-8 | 7.22 | 92.55% | 82.36% | 10.19% | 8.83% | 4.48% | 100.00% | 0.000007 | 1.000 | C11 | 4210 | |
| 2 DIP TANKS | | | | | | | | | | | | | |
| Molding Dip Stain | 506-D5V-1111 | 6.65 | 99.49% | 98.86% | 0.63% | 0.50% | 0.41% | 100.00% | 0.003215 | 42.125 | GV | 5122 | |
| UV LINE | | | | | | | | | | | | | |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 972-75C6-232H | 9.20 | 0.26% | 0.26% | 0.00% | 0.00% | 99.45% | 100.00% | 0.019829 | 25.000 | U1A-U1B-U1C | 9309 | Jul-98 |
| Sprayable UV Topcoat | 970-L6-80 | 8.21 | 50.00% | 50.00% | 0.00% | 0.00% | 42.10% | 100.00% | 0.04688 | 25.000 | U1 or U2 | 9309 | Jul-98 |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | 7.59 | 76.02% | 76.02% | 0.00% | 0.00% | 17.61% | 100.00% | 0.002190 | 25.000 | U4 | 9309 | Oct-98 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00009 | 25.000 | U4 | 9309 | |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #35 Trad. Walnut Filler | 912-D1-346A | 13.33 | 16.97% | 16.97% | 0.00% | 0.00% | 65.53% | 100.00% | 0.000278 | 25.000 | U5 | 9309 | Dec-98 |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | 7.37 | 75.52% | 75.52% | 0.00% | 0.00% | 14.16% | 100.00% | 0.001614 | 25.000 | U5 | 9309 | |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.18 | 88.03% | 87.99% | 0.04% | 0.03% | 8.29% | 100.00% | 0.003299 | 25.000 | U6 | 9309 | Apr-00 |
| Catalyst | 830-82P5-1019E | 9.06 | 39.00% | 39.00% | 0.00% | 0.00% | 46.35% | 100.00% | 0.00014 | 25.000 | U6 | 9309 | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | 6.60 | 99.74% | 99.47% | 0.27% | 0.21% | 0.15% | 100.00% | 0.006201 | 25.000 | U8 | 9309 | |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | 6.55 | 99.95% | 99.89% | 0.06% | 0.05% | 0.03% | 100.00% | 0.008180 | 25.000 | U3, U7, U9 | 9309 | |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Pac Paoli Inc.

Plant Location: 201 Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | | |
|--------------------------|--|----------|
| Total VOC PTE: | | 0.00 |
| Total controlled PM PTE: | | 0.00 |
| Total HAP PTE: | | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | XYLENE | | HAP | | MEK | | HAP | | TOLUENE | |
|-------------------------|--------------------|--------------|----------------------|-------------------------|--------------------------------|--------------|----------------------|-------------------------|--------------------------------|--------------|----------------------|-------------------------|--------------------------------|
| | | | | total | 20.76 | | | total | 2.98 | | | total | 63.59 |
| MATERIAL NAME | MATERIAL ID NUMBER | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 |
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.01 | 1.56% | 0.12 | 0.00 | 0.00 |
| SAP BOOTH #2 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| SAP BOOTH #3 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fast NGR Base | 506-X65VT-514 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH #2 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.01 | 1.56% | 0.12 | 0.00 | 0.00 |
| NGR BOOTH #3 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.01 | 1.56% | 0.12 | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.77 | 3.38 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.31 | 1.34 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.01 | 0.05 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #28 New Congress No | 548-D5V-2811 | 0.07% | 0.05 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.57% | 0.40 | 0.01 | 0.03 |
| #35 Trad. Walnut Filler | 912-D1-346A | 0.35% | 0.00 | 0.01 | 0.03 | | | 0.00 | 0.00 | 9.94% | 0.12 | 0.17 | 0.75 |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 0.75 | 3.28 | | | 0.00 | 0.00 | 12.14% | 0.51 | 0.94 | 4.11 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #1 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 23.70 | 103.83 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.14 | 0.63 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.02 | 0.08 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #2 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 23.70 | 103.83 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.14 | 0.63 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.02 | 0.08 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #3 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 23.70 | 103.83 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.14 | 0.63 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.02 | 0.08 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | 38.22% | 12.49 | 0.09 | 0.39 | 19.56% | 6.39 | 0.05 | 0.20 |
| DESKLINE 1 and 2 | | | | | | | | | | | | | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 0.14 | 0.63 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 2 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Pac Paoli Inc.

Plant Location: 201 Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | | |
|--------------------------|--|----------|
| Total VOC PTE: | | 0.00 |
| Total controlled PM PTE: | | 0.00 |
| Total HAP PTE: | | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | XYLENE | | HAP | | MEK | | HAP | | TOLUENE | |
|------------------------------------|--------------------|--------------|----------------------|-------------------------|--------------------------------|--------------|----------------------|-------------------------|--------------------------------|--------------|----------------------|-------------------------|--------------------------------|
| | | | | total | 20.76 | | | total | 2.98 | | | total | 63.59 |
| MATERIAL NAME | MATERIAL ID NUMBER | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TYPY @ 8,760 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.02 | 1.56% | 0.12 | 0.00 | 0.01 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.38 | 1.68 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.15 | 0.67 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.01 | 0.03 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #28 New Congress Nd | 548-D5V-2811 | 0.07% | 0.05 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.57% | 0.40 | 0.00 | 0.02 |
| #35 Trad. Walnut Filler | 912-D1-346A | 0.35% | 0.00 | 0.00 | 0.01 | | | 0.00 | 0.00 | 9.94% | 0.12 | 0.09 | 0.37 |
| PCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 11.80 | 51.68 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.07 | 0.31 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.01 | 0.04 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 AND SEALER BOOTH | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 11.80 | 51.68 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.07 | 0.31 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.01 | 0.04 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 3.73 | 16.33 | | | 0.00 | 0.00 | 12.14% | 0.51 | 4.67 | 20.46 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 1.05 | 4.61 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.01 | 0.03 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 3 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.01 | 1.56% | 0.12 | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.38 | 1.68 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.15 | 0.67 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #08 Lt. Cherry Filler | 920-D5-3593 | 0.22% | 0.01 | 0.00 | 0.00 | 0.15% | 0.01 | 0.00 | 0.00 | 0.02% | 0.00 | 0.00 | 0.00 |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.00 | 0.01 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | 0.35% | 0.00 | 0.00 | 0.01 | | | 0.00 | 0.00 | 9.94% | 0.12 | 0.04 | 0.19 |
| PCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 11.80 | 51.68 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.07 | 0.31 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.01 | 0.04 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| PCOAT #2 and SEALER | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 11.80 | 51.68 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.07 | 0.31 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.01 | 0.04 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 3.73 | 16.33 | | | 0.00 | 0.00 | 12.14% | 0.51 | 4.67 | 20.46 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 4 | | | | | | | | | | | | | |
| OAT and SEALER BOOTH | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 5.27 | 23.07 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.03 | 0.14 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.00 | 0.02 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 0.17 | 0.73 | | | 0.00 | 0.00 | 12.14% | 0.51 | 0.21 | 0.91 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Ret-Plaz Topcoat | 830-82P5-1414 | 32.84% | 0.96 | 5.27 | 23.07 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.03 | 0.14 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 5 | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #28 New Congress Nd | 548-D5V-2811 | 0.07% | 0.05 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.57% | 0.40 | 0.00 | 0.01 |

Permit: T117-6003-00014

| Summary | | | |
|--------------------------|--|--|-----------------|
| Total VOC PTE: | | | 0.00 |
| Total controlled PM PTE: | | | 0.00 |
| Total HAP PTE: | | | 1,161.25 |

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | XYLENE | | HAP | | MEK | | HAP | | TOLUENE | |
|--------------------------------|--------------------|--------------|----------------------|-------------------------|-------------------------------|--------------|----------------------|-------------------------|-------------------------------|--------------|----------------------|-------------------------|-------------------------------|
| | | | | total | 20.76 | | | total | 2.98 | | | total | 63.59 |
| MATERIAL NAME | MATERIAL ID NUMBER | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | MAXIMUM POTENTIAL LB/HR | MAXIMUM POTENTIAL TPY @ 8,760 |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topco | 830-82P5-1414 | 32.84% | 0.96 | 3.16 | 13.84 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.02 | 0.08 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.00 | 0.01 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 6 (CONFERENCE) | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentra | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.00 | 1.56% | 0.12 | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.17 | 0.75 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.07 | 0.30 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| COAT and SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topco | 830-82P5-1414 | 32.84% | 0.96 | 5.27 | 23.07 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.03 | 0.14 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 0.17 | 0.73 | | | 0.00 | 0.00 | 12.14% | 0.51 | 0.21 | 0.91 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.00 | 0.01 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #28 New Congress No | 548-D5V-2811 | 0.07% | 0.05 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.57% | 0.40 | 0.00 | 0.01 |
| #35 Trad. Walnut Filler | 912-D1-346A | 0.35% | 0.00 | 0.00 | 0.01 | | | 0.00 | 0.00 | 9.94% | 0.12 | 0.04 | 0.17 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | 38.22% | 12.49 | 0.01 | 0.04 | 19.56% | 6.39 | 0.00 | 0.02 |
| DRAWER LINE | | | | | | | | | | | | | |
| AWER ENAMEL BOOTH | | | | | | | | | | | | | |
| Walnut Edge Filler | 450-D1-1846A | 1.75% | 0.04 | 0.02 | 0.09 | 47.01% | 0.97 | 0.55 | 2.42 | 5.07% | 0.10 | 0.06 | 0.26 |
| RAWER COAT BOOTH | | | | | | | | | | | | | |
| Tinted Drawer Coating | 205-D5-134 | 12.16% | 0.27 | 1.10 | 4.81 | | | 0.00 | 0.00 | 3.40% | 0.07 | 0.31 | 1.35 |
| CHAIRLINE | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| New Vinyl Stain Base | 50-X5V-8031 | 0.01% | 0.03 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.08% | 0.15 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.01 | 0.05 | 1.56% | 0.12 | 0.00 | 0.02 |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VROH Vinyl Clear | 370-L5W-1523 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.09% | 0.00 | 0.00 | 0.00 |
| VHC Binder | 506-C5-152 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentra | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.00 | 1.56% | 0.12 | 0.00 | 0.00 |
| Equalizer | 360-Y5-359 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.03 | 0.00 | 0.00 | 0.41% | 0.08 | 0.00 | 0.00 |
| SAP/NGR BOOTH #3 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentra | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | 0.03% | 0.00 | 0.00 | 0.00 | 4.35% | 0.34 | 0.00 | 0.00 | 1.56% | 0.12 | 0.00 | 0.00 |
| Equalizer | 360-Y5-359 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.03 | 0.00 | 0.00 | 0.41% | 0.08 | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.57 | 2.48 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.22 | 0.98 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.01 | 0.04 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #28 New Congress No | 548-D5V-2811 | 0.07% | 0.05 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.57% | 0.40 | 0.01 | 0.02 |
| Inert Mono Glaze | 543-L1-7 | 0.22% | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Glaze | 546-D1-2525A | 0.26% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 |
| SEALER #1 BOOTH | | | | | | | | | | | | | |
| Sealer Low Haps | 831-FL5-74 | 10.23% | 0.35 | 0.34 | 1.50 | | | 0.00 | 0.00 | 14.46% | 0.50 | 0.48 | 2.12 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #1 and SEALER #2 BOOTH | | | | | | | | | | | | | |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Pac Paoli Inc.

Plant Location: 201 Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | | |
|--------------------------|--|----------|
| Total VOC PTE: | | 0.00 |
| Total controlled PM PTE: | | 0.00 |
| Total HAP PTE: | | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | XYLENE | | HAP | | MEK | | HAP | | TOLUENE | |
|-------------------------|--------------------|--------------|----------------------|-----------------|-----------------------|--------------|----------------------|-----------------|-----------------------|--------------|----------------------|-----------------|-----------------------|
| | | | | total | 20.76 | | | total | 2.98 | | | total | 63.59 |
| MATERIAL NAME | MATERIAL ID NUMBER | WEIGHT % HAP | LB HAP per LB SOLIDS | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 | WEIGHT % HAP | LB HAP per LB SOLIDS | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 |
| Winter Rel-Plaz Topco | 830-82P5-1414 | 32.84% | 0.96 | 17.43 | 76.34 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.11 | 0.46 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | 1.33% | #DIV/0! | 0.01 | 0.06 | | | 0.00 | 0.00 | 0.01% | #DIV/0! | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Glide Additive | 50-C5-7796 | 62.50% | 1.20 | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Sealer Low Haps | 831-FL5-74 | 10.23% | 0.35 | 0.34 | 1.50 | | | 0.00 | 0.00 | 14.46% | 0.50 | 0.48 | 2.12 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topco | 830-82P5-1414 | 32.84% | 0.96 | 17.43 | 76.34 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.11 | 0.46 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topco | 830-82P5-1414 | 32.84% | 0.96 | 0.18 | 0.81 | | | 0.00 | 0.00 | 0.20% | 0.01 | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Mineral Spirits Stain R | 201-RM1-302 | 0.20% | #DIV/0! | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| MIX BOOTH | | | | | | | | | | | | | |
| Laquer Thinner | 480-X5VT-1569A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.17% | #DIV/0! | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Vinyl Paste | 50-W1-496 | 0.19% | 0.00 | 0.00 | 0.00 | 37.81% | 0.68 | 0.00 | 0.00 | 18.83% | 0.34 | 0.00 | 0.00 |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | 38.22% | 12.49 | 0.00 | 0.00 | 19.56% | 6.39 | 0.00 | 0.00 |
| VHC Yellow Concentra | 96-Y5V-8 | 0.01% | 0.00 | 0.00 | 0.00 | 0.15% | 0.02 | 0.00 | 0.00 | 0.41% | 0.06 | 0.00 | 0.00 |
| 2 DIP TANKS | | | | | | | | | | | | | |
| Molding Dip Stain | 506-D5V-1111 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| UV LINE | | | | | | | | | | | | | |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topco | 972-75C6-232H | 32.84% | 0.33 | 1.50 | 6.56 | | | 0.00 | 0.00 | 0.20% | 0.00 | 0.01 | 0.04 |
| Sprayable UV Topcoat | 970-L6-80 | 32.84% | 0.66 | 3.16 | 13.84 | | | 0.00 | 0.00 | 0.20% | 0.00 | 0.02 | 0.08 |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | 9.69% | 0.40 | 0.04 | 0.18 | | | 0.00 | 0.00 | 12.14% | 0.51 | 0.05 | 0.22 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #35 Trad. Walnut Filler | 912-D1-346A | 0.35% | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 | 9.94% | 0.12 | 0.01 | 0.04 |
| 01 Natural Maple Wipe | 560-D5-4429 | 0.21% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 7.00% | 0.58 | 0.04 | 0.18 | | | 0.00 | 0.00 | 2.77% | 0.23 | 0.02 | 0.07 |
| Catalyst | 830-82P5-1019E | 0.01% | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.08% | 0.00 | 0.00 | 0.00 |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |

4.74 20.76 0.68 2.98 14.52 63.59

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations
Company Name: Paoli, Inc Paoli Inc.
Plant Location: 201 E. Mar Orleans, Indiana
County: Orange Orange
Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 0.00 |
| Total controlled PM PTE: | 0.00 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| MATERIAL NAME | MATERIAL ID NUMBER | MIBK | | | | Ethylbenzene | | | | Cumene | | | |
|-----------------------------|--------------------|--------------|----------------------|-----------------|-----------------------|--------------|----------------------|-----------------|-----------------------|--------------|----------------------|-----------------|-----------------------|
| | | WEIGHT % HAP | LB HAP per LB SOLIDS | total | 0.01 | WEIGHT % HAP | LB HAP per LB SOLIDS | total | 191.91 | WEIGHT % HAP | LB HAP per LB SOLIDS | total | 0.10 |
| | | | | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 | | | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 | | | POTENTIAL LB/HR | POTENTIAL TPY @ 8,760 |
| DESKLINE 1 | | | | | | | | | | | | | |
| SAP BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| SAP BOOTH #2 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| SAP BOOTH #3 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fast NGR Base | 506-X65VT-514 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH #2 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| NGR BOOTH #3 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.13 | 0.57 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.01 | 0.02 |
| #28 New Congress No-Wipe | 548-D5V-2811 | | | 0.00 | 0.00 | 0.02% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | 0.06% | 0.00 | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.10 | 0.45 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #1 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 5.56 | 24.36 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.02 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #2 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 5.56 | 24.36 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.02 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH #3 | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 5.56 | 24.36 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.02 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Fish Eye Eliminator | 50-C1-613A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 1 and 2 | | | | | | | | | | | | | |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 0.03 | 0.15 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 2 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH #1 | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc Paoli Inc.

Plant Location: 201 E. Mar Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 0.00 |
| Total controlled PM PTE: | 0.00 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | MIBK | | HAP | Ethylbenzene | | | HAP | | Cumene | |
|-----------------------------|----------------|-----|--|-------|------|-------|--------------|-------|--------|-------|------|--------|------|
| | | | | total | 0.01 | | | total | 191.91 | | | total | 0.10 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.06 | 0.28 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 | 0.01 |
| #28 New Congress No-Wipe | 548-D5V-2811 | | | 0.00 | 0.00 | 0.02% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | 0.06% | 0.00 | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 |
| TOPCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 2.77 | 12.13 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.01 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 AND SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 2.77 | 12.13 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.01 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.51 | 2.22 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 0.25 | 1.08 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | | | | | | | | | | | | | |
| DESKLINE 3 | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.06 | 0.28 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #08 Lt. Cherry Fill Glaze | 920-D5-3593 | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 | 0.00 |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 | 0.01 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | 0.06% | 0.00 | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 |
| TOPCOAT 1 and 3 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 2.77 | 12.13 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.01 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 and SEALER | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 2.77 | 12.13 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.01 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.51 | 2.22 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | | | | | | | | | | | | | |
| DESKLINE 4 | | | | | | | | | | | | | |
| PCOAT and SEALER BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 1.24 | 5.41 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.02 | 0.10 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 1.24 | 5.41 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | | | | | | | | | | | | | |
| DESKLINE 5 | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #28 New Congress No-Wipe | 548-D5V-2811 | | | 0.00 | 0.00 | 0.02% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 0.74 | 3.25 | | | 0.00 | 0.00 |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc Paoli Inc.

Plant Location: 201 E. Mar Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 0.00 |
| Total controlled PM PTE: | 0.00 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | MIBK | | HAP | Ethylbenzene | | HAP | | Cumene | |
|--------------------------------|----------------|-------|------|-------|------|--------|--------------|--------|-------|-------|--------|------|
| | | | | total | 0.01 | | total | 191.91 | | | total | 0.10 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 6 (CONFERENCE) | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00% | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.03 | 0.13 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| PCOAT and SEALER BOOTH | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 1.24 | 5.41 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.02 | 0.10 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 |
| #28 New Congress No-Wipe | 548-D5V-2811 | | | 0.00 | 0.00 | 0.02% | 0.01 | 0.00 | 0.00 | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | 0.06% | 0.00 | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| DRAWER LINE | | | | | | | | | | | | |
| DRAWER ENAMEL BOOTH | | | | | | | | | | | | |
| Walnut Edge Filler | 450-D1-1846A | 0.14% | 0.00 | 0.00 | 0.01 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| DRAWER COAT BOOTH | | | | | | | | | | | | |
| Tinted Drawer Coating | 205-D5-134 | | | 0.00 | 0.00 | 2.84% | 0.06 | 0.26 | 1.12 | 0.04% | 0.00 | 0.00 |
| CHAIRLINE | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Naptha | 920-X5-3848 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| New Vinyl Stain Base | 50-X5V-8031 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VROH Vinyl Clear | 370-L5W-1523 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Binder | 506-C5-152 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 |
| Equalizer | 360-Y5-359 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| SAP/NGR BOOTH #3 | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 |
| Equalizer | 360-Y5-359 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.10 | 0.42 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 |
| #28 New Congress No-Wipe | 548-D5V-2811 | | | 0.00 | 0.00 | 0.02% | 0.01 | 0.00 | 0.00 | | 0.00 | 0.00 |
| Inert Mono Glaze | 543-L1-7 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 |
| Glaze | 546-D1-2525A | | | 0.00 | 0.00 | 0.01% | 0.00 | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 |
| SEALER #1 BOOTH | | | | | | | | | | | | |
| Sealer Low Haps | 831-FL5-74 | | | 0.00 | 0.00 | 2.42% | 0.08 | 0.08 | 0.35 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| TOPCOAT #1 and SEALER #2 BOOTH | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 4.09 | 17.91 | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | 0.31% | #DIV/0! | 0.00 | 0.01 | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Glide Additive | 50-C5-7796 | | | 0.00 | 0.00 | 16.67% | 0.32 | 0.00 | 0.00 | | 0.00 | 0.00 |

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED)

PM, VOC and HAP Emission calculations

Company Name: Paoli, Inc Paoli Inc.

Plant Location: 201 E. Mar Orleans, Indiana

County: Orange Orange

Permit: T117-6003-00014

Summary

| | |
|--------------------------|----------|
| Total VOC PTE: | 0.00 |
| Total controlled PM PTE: | 0.00 |
| Total HAP PTE: | 1,161.25 |

DESCRIBE THE PRODUCT YOU ARE COATING: Office Furniture

INDICATE THE MATERIAL YOU ARE COATING: Wood

| | | HAP | | MIBK | | HAP | | Ethylbenzene | | HAP | | Cumene | |
|-------------------------------|----------------|-----|--|-------|------|-------|------|--------------|--------|-------|---------|--------|------|
| | | | | total | 0.01 | | | total | 191.91 | | | total | 0.10 |
| Sealer Low Haps | 831-FL5-74 | | | 0.00 | 0.00 | 2.42% | 0.08 | 0.08 | 0.35 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 4.09 | 17.91 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 7.71% | 0.22 | 0.04 | 0.19 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Mineral Spirits Stain Reducer | 201-RM1-302 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | #DIV/0! | 0.00 | 0.00 |
| MIX BOOTH | | | | | | | | | | | | | |
| Laquer Thinner | 480-X5VT-1569A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Stain Reducer | 506-X5-151A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Vinyl Paste | 50-W1-496 | | | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #45 Walnut Shade | 371-D1-859 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| 2 DIP TANKS | | | | | | | | | | | | | |
| Molding Dip Stain | 506-D5V-1111 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| UV LINE | | | | | | | | | | | | | |
| TOPCOAT BOOTH | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 972-75C6-232H | | | 0.00 | 0.00 | 7.71% | 0.08 | 0.35 | 1.54 | | | 0.00 | 0.00 |
| Sprayable UV Topcoat | 970-L6-80 | | | 0.00 | 0.00 | 7.71% | 0.15 | 0.74 | 3.25 | | | 0.00 | 0.00 |
| SEALER BOOTH | | | | | | | | | | | | | |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 1.32% | 0.06 | 0.01 | 0.02 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | 0.06% | 0.00 | 0.00 | 0.00 | 0.05% | 0.00 | 0.00 | 0.00 |
| 01 Natural Maple Wipe Stain | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.10% | 0.00 | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | | | 0.00 | 0.00 | 1.18% | 0.10 | 0.01 | 0.03 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | | | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00% | 0.00 | 0.00 | 0.00 |
| SAP BOOTH | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| | | | | 0.00 | 0.01 | | | 43.82 | 191.91 | | | 0.02 | 0.10 |

| STATE OF INDIANA | | | | | | | | | | | | | | | | | |
|--|----------------|--------|-----------|-----------|-----------|--------|-----------|--------------|-----------|--------|-----------|---------------|-----------|--------|-----------|-----------|-----------|
| DEPARTMENT OF ENVIRONMENTAL MANAGEMENT | | | | | | | | | | | | | | | | | |
| OFFICE OF AIR MANAGEMENT | | | | | | | | | | | | | | | | | |
| SURFACE COATING AND ACCESSORY SOLVENT (AS APPLIED) | | | | | | | | | | | | | | | | | |
| PM, VOC and HAP Emission calculations | | | | | | | | | | | | | | | | | |
| Company Name: Paoli, InPaoli Inc. | | | | | | | | | | | | | | | | | |
| Plant Location: 201 E. MaOrleans, Indiana | | | | | | | | | | | | | | | | | |
| County: Orange | | | | | | | | | | | | | | | | | |
| Permit: T117-6003-00014 | | | | | | | | | | | | | | | | | |
| | | HAP | | Methanol | | HAP | | Formaldehyde | | HAP | | Glycol Ethers | | HAP | | Phenol | |
| | | | | total | 59.13 | | | total | 6.88 | | | total | 0.01 | | | total | 0.00 |
| | MATERIAL | WEIGHT | LB HAP | MAXIMUM | MAXIMUM | WEIGHT | LB HAP | MAXIMUM | MAXIMUM | WEIGHT | LB HAP | MAXIMUM | MAXIMUM | WEIGHT | LB HAP | MAXIMUM | MAXIMUM |
| MATERIAL NAME | ID | % | per | POTENTIAL | POTENTIAL | % | per | POTENTIAL | POTENTIAL | % | per | POTENTIAL | POTENTIAL | % | per | POTENTIAL | POTENTIAL |
| | NUMBER | HAP | LB SOLIDS | LB/HR | TPY @ | HAP | LB SOLIDS | LB/HR | TPY @ | HAP | LB SOLIDS | LB/HR | TPY @ | HAP | LB SOLIDS | LB/HR | TPY @ |
| | | | | | 8,760 | | | | 8,760 | | | | 8,760 | | | | 8,760 |
| TOPCOAT #2 AND SEALER BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.09 | 0.40 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.88 | 3.84 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 0.135% | 0.01 | 0.05 | 0.23 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.97 | 4.24 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.01 | 0.04 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.08 | 0.34 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 3 | | | | | | | | | | | | | | | | | |
| SAP BOOTH | | | | | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.67% | 0.09 | 0.00 | 0.01 | | | 0.00 | 0.00 | 0.08% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| NGR BOOTH | | | | | | | | | | | | | | | | | |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.67% | 0.09 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.08% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 0.04% | 0.00 | 0.00 | 0.01 | 0.077% | 0.01 | 0.00 | 0.02 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.15 | 0.64 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | | | | | |
| #08 Lt. Cherry Fill Glaze | 920-D5-3593 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| 01 Natural Maple Wipe Sta | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT 1 and 3 BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.09 | 0.40 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.88 | 3.84 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT #2 and SEALER | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.09 | 0.40 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.88 | 3.84 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 0.135% | 0.01 | 0.05 | 0.23 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.97 | 4.24 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 4 | | | | | | | | | | | | | | | | | |
| PCOAT and SEALER BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.04 | 0.18 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.39 | 1.71 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 0.135% | 0.01 | 0.00 | 0.01 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.04 | 0.19 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.04 | 0.18 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.39 | 1.71 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 5 | | | | | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | | | | | |
| #28 New Congress No-Wip | 548-D5V-2811 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| TOPCOAT BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.02 | 0.11 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.23 | 1.03 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Rel-Plaz Reducer | 480-X5V3-1666 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Retarder | 250-RM1-308A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| DESKLINE 6 (CONFERENCE) | | | | | | | | | | | | | | | | | |
| SAP/NGR BOOTH #1 | | | | | | | | | | | | | | | | | |
| #12 VHC SAP | 506-D5-244 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #1 VHC NGR | 506-D5-483 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Stain Reducer | 201-RM1-400 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Yellow Concentrate | 96-Y5V-8 | 0.67% | 0.09 | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.08% | 0.01 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| White Wash Toner | 373-E5V-2140A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WASHCOAT BOOTH | | | | | | | | | | | | | | | | | |
| VHC Pre-cat W/C | 370-L5-1457 | 0.04% | 0.00 | 0.00 | 0.00 | 0.077% | 0.01 | 0.00 | 0.01 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.07 | 0.29 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| PCOAT and SEALER BOOTH | | | | | | | | | | | | | | | | | |
| Winter Rel-Plaz Topcoat | 830-82P5-1414 | | | 0.00 | 0.00 | 0.252% | 0.01 | 0.04 | 0.18 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.39 | 1.71 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| VHC Sealer | 370-L5-1462 | | | 0.00 | 0.00 | 0.135% | 0.01 | 0.00 | 0.01 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Catalyst | 830-82P5-1019E | 51.28% | 0.84 | 0.04 | 0.19 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| WIPESTAIN BOOTH | | | | | | | | | | | | | | | | | |
| 01 Natural Maple Wipe Sta | 560-D5-4429 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #28 New Congress No-Wip | 548-D5V-2811 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| #35 Trad. Walnut Filler | 912-D1-346A | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 | | | 0.00 | 0.00 |
| REPAIR BOOTH | | | | | | | | | | | | | | | | | |

Subpart JJ—National Emission Standards for Wood Furniture Manufacturing Operations

SOURCE: 60 FR 62936, Dec. 7, 1995, unless otherwise noted.

§ 63.800 Applicability.

(a) The affected source to which this subpart applies is each facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63, subpart A, § 63.2. The owner or operator of a source that meets the definition for an incidental wood furniture manufacturer shall maintain purchase or usage records demonstrating that the source meets the definition in § 63.801 of this subpart, but the source shall not be subject to any other provisions of this subpart.

(b) A source that complies with the limits and criteria specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section is an area source for the purposes of this subpart and is not subject to any other provision of this rule, provided that: In the case of paragraphs (b)(1) and (b)(2), finishing materials, adhesives, cleaning solvents and washoff solvents used for wood furniture or wood furniture component manufacturing operations account for at least 90 percent of annual HAP emissions at the plant site, and if the plant site has HAP emissions that do not originate from the listed materials, the owner or operator shall keep any records necessary to demonstrate that the 90 percent criterion is being met. A source that initially relies on the limits and criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) to become an area source, but subsequently exceeds the relevant limit (without first obtaining and complying with other limits that keep its potential to emit hazardous air pollutants below major source levels), becomes a major source and must comply thereafter with all applicable provisions of this subpart starting on the applicable compliance date in § 63.800. Nothing in this paragraph (b) is intended to preclude a source from limiting its potential to emit through other appropriate mecha-

nisms that may be available through the permitting authority.

(1) The owner or operator of the source uses no more than 250 gallons per month, for every month, of coating, gluing, cleaning, and washoff materials at the source, including materials used for source categories other than wood furniture (surface coating), but excluding materials used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining motor vehicles operated by the facility, or the use of toxic chemicals contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion). The owner or operator shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month, and upon request submit such records to the Administrator. These records shall be maintained for five years.

(2) The owner or operator of the source uses no more than 3,000 gallons per rolling 12-month period, for every 12-month period, of coating, gluing, cleaning, and washoff materials at the source, including materials used for source categories other than wood furniture (surface coating), but excluding materials used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining motor vehicles operated by the facility, or the use of toxic chemicals contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion). A rolling 12-month period includes the previous 12 months of operation. The owner or operator of the source shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month and the total gallons used each previous month, and upon request submit such records to the Administrator. Because records are needed over the previous set of 12 months, the owner or operator shall keep monthly records beginning no less than one year before the compliance date specified in § 63.800(e).

§ 63.801

40 CFR Ch. I (7–1–99 Edition)

Records shall be maintained for five years.

(3) The source emits no more than 4.5 Mg (5 tons) of any one HAP per rolling 12-month period and no more than 11.4 Mg (12.5 tons) of any combination of HAP per rolling 12-month period, and at least 90 percent of the plantwide emissions per rolling 12-month period are associated with the manufacture of wood furniture or wood furniture components.

(c) This subpart does not apply to research or laboratory facilities as defined in § 63.801.

(d) Owners or operators of affected sources shall also comply with the requirements of subpart A of this part (General Provisions), according to the applicability of subpart A to such sources, as identified in Table 1 of this subpart.

(e) The compliance date for existing affected sources that emit less than 50 tons per year of HAP in 1996 is December 7, 1998. The compliance date for existing affected sources that emit 50 tons or more of hazardous air pollutants in 1996 is November 21, 1997. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) HAP such that the source becomes a major source that is subject to this subpart shall comply with this subpart one year after becoming a major source.

(f) New affected sources must comply with the provisions of this standard immediately upon startup or by December 7, 1995, whichever is later. New area sources that become major sources shall comply with the provisions of this standard immediately upon becoming a major source.

(g) Reconstructed affected sources are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment (e.g., incinerators, carbon adsorbers, etc.) are not considered in determining whether the facility has been reconstructed, unless the control equipment is required as part of the process (e.g., product recovery). Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs. For

example, an affected source may convert to waterborne coatings to meet the requirements of this subpart. At most facilities, this conversion will require the replacement of existing storage tanks, mix equipment, and transfer lines. The cost of replacing the equipment is not considered in determining whether the facility has been reconstructed.

[60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30259, June 3, 1997]

§ 63.801 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the CAA and in subpart A (General Provisions) of this part.

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Under this subpart, adhesives shall not be considered coatings or finishing materials. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

Aerosol adhesive means an adhesive that is dispensed from a pressurized container as a suspension of fine solid or liquid particles in gas.

Affected source means a wood furniture manufacturing facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63.2, excluding sources that meet the criteria established in § 63.801(a), (b) and (c) of this subpart.

Alternative method means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

As applied means the HAP and solids content of the coating or contact adhesive that is actually used for coating or gluing the substrate. It includes the contribution of materials used for in-house dilution of the coating or contact adhesive.

Basecoat means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials, and is usually topcoated for protection.

Baseline conditions means the conditions that exist prior to an affected source implementing controls, such as a control system.

Building enclosure means a building housing a process that meets the requirements of a temporary total enclosure. The EPA Method 204E is used to identify all emission points from the building enclosure and to determine which emission points must be tested. For additional information see *Guidelines for Determining Capture Efficiency*, January 1994. Docket No. A-93-10, Item No. IV-B-1.

Capture device means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

Capture efficiency means the fraction of all organic vapors generated by a process that are directed to a control device.

Certified product data sheet (CPDS) means documentation furnished by coating or adhesive suppliers or an outside laboratory that provides:

(1) The VHAP content of a finishing material, contact adhesive, or solvent, by percent weight, measured using the EPA Method 311 (as promulgated in this subpart), or an equivalent or alternative method (or formulation data if the coating meets the criteria specified in § 63.805(a));

(2) The solids content of a finishing material or contact adhesive by percent weight, determined using data from the EPA Method 24, or an alternative or equivalent method (or formulation data if the coating meets the criteria specified in § 63.805 (a)); and

(3) The density, measured by EPA Method 24 or an alternative or equivalent

method. Therefore, the reportable VHAP content shall represent the maximum aggregate emissions potential of the finishing material, adhesive, or solvent in concentrations greater than or equal to 1.0 percent by weight or 0.1 percent for VHAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), as formulated. Only VHAP present in concentrations greater than or equal to 1.0 percent by weight, or 0.1 percent for VHAP that are carcinogens, must be reported on the CPDS. The purpose of the CPDS is to assist the affected source in demonstrating compliance with the emission limitations presented in § 63.802.

NOTE: Because the optimum analytical conditions under EPA Method 311 vary by coating, the coating or adhesive supplier may also choose to include on the CPDS the optimum analytical conditions for analysis of the coating, adhesive, or solvent using EPA Method 311. Such information may include, but not be limited to, separation column, oven temperature, carrier gas, injection port temperature, extraction solvent, and internal standard.)

Cleaning operations means operations in which organic HAP solvent is used to remove coating materials or adhesives from equipment used in wood furniture manufacturing operations.

Coating means a protective, decorative, or functional film applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, enamels, inks, and temporary protective coatings. Aerosol spray paints used for touch-up and repair are not considered coatings under this subpart.

Coating application station means the part of a coating operation where the coating is applied, e.g., a spray booth.

Coating operation means those activities in which a coating is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

Coating solids (or solids) means the part of the coating which remains after the coating is dried or cured; solids content is determined using data from the EPA Method 24, or an equivalent or alternative method.

Compliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that meets the emission limits specified in Table 3 of this subpart.

Contact adhesive means an adhesive that is applied to two substrates, dried, and mated under only enough pressure to result in good contact. The bond is immediate and sufficiently strong to hold pieces together without further clamping, pressure, or airing.

Continuous coater means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor. Finishing materials that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

Continuous compliance means that the affected source is meeting the emission limitations and other requirements of the rule at all times and is fulfilling all monitoring and recordkeeping provisions of the rule in order to demonstrate compliance.

Control device means any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

Control device efficiency means the ratio of the pollutant released by a control device and the pollutant introduced to the control device.

Control system means the combination of capture and control devices used to reduce emissions to the atmosphere.

Conventional air spray means a spray coating method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.

Data quality objective (DQO) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Day means a period of 24 consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.

Disposed offsite means sending used organic HAP solvent or coatings outside of the facility boundaries for disposal.

Emission means the release or discharge, whether directly or indirectly, of HAP into the ambient air.

Enamel means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or previously applied enamel coats. In some cases, another finishing material may be applied as a topcoat over the enamel.

Equipment leak means emissions of VHAP from pumps, valves, flanges, or other equipment used to transfer or apply coatings, adhesives, or organic HAP solvents.

Equivalent method means any method of sampling and analyzing for an air pollutant that has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specific conditions.

Finishing material means a coating used in the wood furniture industry. Such materials include, but are not limited to, stains, basecoats, washcoats, enamels, sealers, and topcoats.

Finishing operation means those operations in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

Foam adhesive means a contact adhesive used for gluing foam to fabric, foam to foam, and fabric to wood.

Gluing operation means those operations in which adhesives are used to join components, for example, to apply a laminate to a wood substrate or foam to fabric.

Incidental wood furniture manufacturer means a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Incinerator means, for the purposes of this industry, an enclosed combustion device that thermally oxidizes volatile organic compounds to CO and CO₂. This term does not include devices that burn municipal or hazardous waste material.

Janitorial maintenance means the upkeep of equipment or building structures that is not directly related to the manufacturing process, for example, cleaning of restroom facilities.

Lower confidence limit (LCL) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Material safety data sheet (MSDS) means the documentation required for hazardous chemicals by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR Part 1910) for a solvent, cleaning material, contact adhesive, coating, or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations, and handling procedures.

Noncompliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that has a VHAP content (VOC content for the strippable booth coating) greater than the emission limitation presented in Table 3 of this subpart.

Nonporous substrate means a surface that is impermeable to liquids. Examples include metal, rigid plastic, flexible vinyl, and rubber.

Normally closed container means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

Operating parameter value means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

Organic HAP solvent means a HAP that is a volatile organic liquid used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic HAP solvent evaporates during drying and does not become a part of the dried film.

Overall control efficiency means the efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.

Permanent total enclosure means a permanently installed enclosure that completely surrounds a source of emissions such that all emissions are captured and contained for discharge through a control device. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Recycled onsite means the reuse of an organic HAP solvent in a process other than cleaning or washoff.

Reference method means any method of sampling and analyzing for an air pollutant that is published in Appendix A of 40 CFR part 60.

Research or laboratory facility means any stationary source whose primary purpose is to conduct research and development to develop new processes and products where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Responsible official has the meaning given to it in 40 CFR part 70, State Operating Permit Programs (Title V permits).

Sealer means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Special purpose finishing materials that are

used in some finishing systems to optimize aesthetics are not sealers.

Solvent means a liquid used in a coating or contact adhesive to dissolve or disperse constituents and/or to adjust viscosity. It evaporates during drying and does not become a part of the dried film.

Stain means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the substrate. It includes, but is not limited to, nongrain raising stains, equalizer stains, prestains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

Storage containers means vessels or tanks, including mix equipment, used to hold finishing, gluing, cleaning, or washoff materials.

Strippable spray booth material means a coating that:

- (1) Is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;
- (2) That is subsequently peeled off and disposed; and
- (3) By achieving (1) and (2) of this definition reduces or eliminates the need to use organic HAP solvents to clean spray booth walls.

Substrate means the surface onto which a coating or contact adhesive is applied (or into which a coating or contact adhesive is impregnated).

Temporary total enclosure means an enclosure that meets the requirements of § 63.805(e)(1) (i) through (iv) and is not permanent, but constructed only to measure the capture efficiency of pollutants emitted from a given source. Additionally, any exhaust point from the enclosure shall be at least four equivalent duct or hood diameters from each natural draft opening. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Thinner means a volatile liquid that is used to dilute coatings or contact adhesives (to reduce viscosity, color strength, and solids, or to modify drying conditions).

Topcoat means the last film-building finishing material that is applied in a finishing system.

Touchup and repair means the application of finishing materials to cover minor finishing imperfections.

VHAP means any volatile hazardous air pollutant listed in Table 2 to Subpart JJ.

VHAP of potential concern means any VHAP from the list in table 6 of this subpart.

Volatile organic compound (VOC) means any organic compound which participates in atmospheric photochemical reactions, that is, any organic compound other than those which the Administrator designates as having negligible photochemical reactivity. A VOC may be measured by a reference method, an equivalent method, an alternative method, or by procedures specified under any rule. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, the owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard. For a list of compounds that the Administrator has designated as having negligible photochemical reactivity, refer to 40 CFR part 51.10.

Washcoat means a transparent special purpose finishing material having a solids content by weight of 12.0 percent by weight or less. Washcoats are applied over initial stains to protect, to control color, and to stiffen the wood fibers in order to aid sanding.

Washoff operations means those operations in which organic HAP solvent is used to remove coating from wood furniture or a wood furniture component.

Wood furniture means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

Wood furniture component means any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. However, foam seat cushions manufactured and fabricated at a facility that does not engage in any other

wood furniture or wood furniture component manufacturing operation are excluded from this definition.

Wood furniture manufacturing operations means the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

(b) The nomenclature used in this subpart has the following meaning:

(1) A_k = the area of each natural draft opening (k) in a total enclosure, in square meters.

(2) C_c = the VHAP content of a finishing material (c), in kilograms of volatile hazardous air pollutants per kilogram of coating solids (kg VHAP/kg solids), as supplied. Also given in pounds of volatile hazardous air pollutants per pound of coating solids (lb VHAP/lb solids).

(3) C_{aj} = the concentration of VHAP in gas stream (j) exiting the control device, in parts per million by volume.

(4) C_{bi} = the concentration of VHAP in gas stream (i) entering the control device, in parts per million by volume.

(5) C_{di} = the concentration of VHAP in gas stream (i) entering the control device from the affected source, in parts per million by volume.

(6) C_{ik} = the concentration of VHAP in uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

(7) E = the emission limit achieved by an emission point or a set of emission points, in kg VHAP/kg solids (lb VHAP/lb solids).

(8) F = the control device efficiency, expressed as a fraction.

(9) FV = the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

(10) G = the VHAP content of a contact adhesive, in kg VHAP/kg solids (lb VHAP/lb solids), as applied.

(11) M = the mass of solids in finishing material used monthly, kg solids/month (lb solids/month).

(12) N = the capture efficiency, expressed as a fraction.

(13) Q_{aj} = the volumetric flow rate of gas stream (j) exiting the control device, in dry standard cubic meters per hour.

(14) Q_{bi} = the volumetric flow rate of gas stream (i) entering the control de-

vice, in dry standard cubic meters per hour.

(15) Q_{di} = the volumetric flow rate of gas stream (i) entering the control device from the emission point, in dry standard cubic meters per hour.

(16) Q_{ik} = the volumetric flow rate of uncontrolled gas stream (k) emitted directly to the atmosphere from the emission point, in dry standard cubic meters per hour.

(17) $Q_{in i}$ = the volumetric flow rate of gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).

(18) $Q_{out j}$ = the volumetric flow rate of gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).

(19) R = the overall efficiency of the control system, expressed as a percentage.

(20) S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

(21) W = the amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

(22) ac = after the control system is installed and operated.

(23) bc = before control.

[60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30260, June 3, 1997; 62 FR 31363, June 9, 1997; 63 FR 71380, Dec. 28, 1998]

§ 63.802 Emission limits.

(a) Each owner or operator of an existing affected source subject to this subpart shall:

(1) Limit VHAP emissions from finishing operations by meeting the emission limitations for existing sources presented in Table 3 of this subpart, using any of the compliance methods in § 63.804(a). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in § 63.803(l)(2) for determining styrene and formaldehyde usage.

(2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives based on the following criteria:

(i) For foam adhesives (contact adhesives used for upholstery operations) used in products that meet the upholstered seating flammability requirements of California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies, the VHAP content of the adhesive shall not exceed 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied; or

(ii) For all other contact adhesives (including foam adhesives used in products that do not meet the standards presented in paragraph (a)(2)(i) of this section, but excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, the VHAP content of the adhesive shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.

(3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

(b) Each owner or operator of a new affected source subject to this subpart shall:

(1) Limit VHAP emissions from finishing operations by meeting the emission limitations for new sources presented in Table 3 of this subpart using any of the compliance methods in § 63.804(d). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in § 63.803(l)(2) for determining styrene and formaldehyde usage.

(2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, of no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied, using either of the compliance methods in § 63.804(e).

(3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

§ 63.803 Work practice standards.

(a) *Work practice implementation plan.* Each owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of this section. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in paragraphs (b) through (l) of this section or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

(b) *Operator training course.* Each owner or operator of an affected source shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

(1) A list of all current personnel by name and job description that are required to be trained;

(2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;

(3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and

(4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

(c) *Inspection and maintenance plan.* Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

(1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;

(2) An inspection schedule;

(3) Methods for documenting the date and results of each inspection and any repairs that were made;

(4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:

(i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and

(ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.

(d) *Cleaning and washoff solvent accounting system.* Each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:

(1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in § 63.801 of this subpart;

(2) The number of pieces washed off, and the reason for the washoff; and

(3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled on-site or disposed offsite.

(e) *Chemical composition of cleaning and washoff solvents.* Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.

(f) *Spray booth cleaning.* Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

(g) *Storage requirements.* Each owner or operator of an affected source shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

(h) *Application equipment requirements.* Each owner or operator of an affected source shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:

(1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

(2) For touchup and repair under the following conditions:

(i) The touchup and repair occurs after completion of the finishing operation; or

(ii) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.

(3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;

(4) When emissions from the finishing application station are directed to a control device;

(5) The conventional air gun is used to apply finishing materials and the

cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or

(6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology.

The affected source shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:

(i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

(i) *Line cleaning.* Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

(j) *Gun cleaning.* Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

(k) *Washoff operations.* Each owner or operator of an affected source shall control emissions from washoff operations by:

(1) Using normally closed tanks for washoff; and

(2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

(l) *Formulation assessment plan for finishing operations.* Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

(1) Identifies VHAP from the list presented in Table 5 of this subpart that

are being used in finishing operations by the affected source;

(2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (l)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in § 63.805 (d) or (e).

(3) Tracks the annual usage of each VHAP identified in (l)(1) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA.

(4) If, after November 1998, the annual usage of the VHAP identified in paragraph (l)(1) exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

(i) The exceedance is no more than 15.0 percent above the baseline level;

(ii) Usage of the VHAP is below the de minimis level presented in Table 5 of this subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in § 63.805 (d) or (e);

(iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or

(iv) The source of the pollutant is a finishing material with a VOC content

of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.

(5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

(6) If, after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the *de minimis* level. If the explanation is not one of those listed in paragraphs (1)(4)(i) through (1)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (1)(5) of this section.

[60 FR 62936, Dec. 7, 1995, as amended at 63 FR 71380, Dec. 28, 1998]

§ 63.804 Compliance procedures and monitoring requirements.

(a) The owner or operator of an existing affected source subject to § 63.802(a)(1) shall comply with those provisions using any of the methods presented in § 63.804 (a)(1) through (a)(4).

(1) Calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 1.0;

$$E = \frac{(M_{c1} C_{c1} + M_{c2} C_{c2} + \dots + M_{cn} C_{cn} + S_1 W_1 + S_2 W_2 + \dots + S_n W_n)}{(M_{c1} + M_{c2} + \dots + M_{cn})} \quad \text{Equation 1}$$

(2) Use compliant finishing materials according to the following criteria:

(i) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;

(ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and

(iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

(3) Use a control system with an overall control efficiency (R) such that the value of E_{ac} in Equation 2 is no greater than 1.0.

$$R = [(E_{bc} - E_{ac}) / E_{bc}] (100) \quad \text{Equation 2}$$

The value of E_{bc} in Equation 2 shall be calculated using Equation 1; or

(4) Use any combination of an averaging approach, as described in paragraph (a)(1) of this section, compliant finishing materials, as described in paragraph (a)(2) of this section, and a

control system, as described in paragraph (a)(3) of this section.

(b) The owner or operator of an affected source subject to § 63.802(a)(2)(i) shall comply with the provisions by using compliant foam adhesives with a VHAP content no greater than 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied.

(c) The owner or operator of an affected source subject to § 63.802(a)(2)(ii) shall comply with those provisions by using either of the methods presented in § 63.804 (c)(1) and (c)(2).

(1) Use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied; or

(2) Use a control system with an overall control efficiency (R) such that the value of G_{ac} is no greater than 1.0. $R = [(G_{bc} - G_{ac}) / G_{bc}] (100)$ Equation 3

(d) The owner or operator of a new affected source subject to § 63.802(b)(1) may comply with those provisions by using any of the following methods:

(1) Calculate the average VHAP content across all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 0.8;

(2) Use compliant finishing materials according to the following criteria:

(i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;

(ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and

(iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.

(3) Use a control system with an overall control efficiency (R) such that the value of E_{ac} in Equation 4 is no greater than 0.8.

$$R = [(E_{bc} - E_{ac}) / E_{bc}] (100) \quad \text{Equation 4}$$

The value of E_{bc} in Equation 4 shall be calculated using Equation 1; or

(4) Use any combination of an averaging approach, as described in (d)(1), compliant finishing materials, as described in (d)(2), and a control system, as described in (d)(3).

(e) The owner or operator of a new affected source subject to § 63.802(b)(2) shall comply with the provisions using either of the following methods:

(1) Use compliant contact adhesives with a VHAP content no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied; or

(2) Use a control system with an overall control efficiency (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2.

(f) *Initial compliance.* (1) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(1) or (d)(1) shall submit the results of the averaging calculation (Equation 1) for the first month with the initial compliance status report required by § 63.807(b). The first month's calculation shall include data for the entire month in which the compliance date falls. For example, if the source's compliance date is November 21, 1997, the averaging calculation shall include data from November 1, 1997 to November 30, 1997.

(2) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(2) or (d)(2) shall submit an initial compliance status report, as required by § 63.807(b), stating that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, are being used by the affected source.

(3) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that are complying through the procedures established in § 63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate initial compliance by:

(i) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or

(ii) Submitting an initial compliance status report, as required by § 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used; the viscosity of the coating in the reservoir is being monitored; and compliant thinners are being used. The affected source shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.

(4) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(3) or (d)(3) shall demonstrate initial compliance by:

(i) Submitting a monitoring plan that identifies each operating parameter to be monitored for the capture device and discusses why each parameter is appropriate for demonstrating continuous compliance;

(ii) Conducting an initial performance test as required under § 63.7 using the procedures and test methods listed in § 63.7 and § 63.805 (c) and (d) or (e);

(iii) Calculating the overall control efficiency (R) following the procedures in § 63.805 (d) or (e); and

(iv) Determining those operating conditions critical to determining compliance and establishing one or more operating parameters that will ensure compliance with the standard.

(A) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter.

(B) For compliance with a catalytic incinerator equipped with a fixed catalyst bed, the minimum gas temperature both upstream and downstream of the catalyst bed shall be the operating parameter.

(C) For compliance with a catalytic incinerator equipped with a fluidized catalyst bed, the minimum gas temperature upstream of the catalyst bed and the pressure drop across the cata-

lyst bed shall be the operating parameters.

(D) For compliance with a carbon adsorber, the operating parameters shall be the total regeneration mass stream flow for each regeneration cycle and the carbon bed temperature after each regeneration, or the concentration level of organic compounds exiting the adsorber, unless the owner or operator requests and receives approval from the Administrator to establish other operating parameters.

(E) For compliance with a control device not listed in this section, one or more operating parameter values shall be established using the procedures identified in § 63.804(g)(4)(vi).

(v) Owners or operators complying with § 63.804(f)(4) shall calculate each site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, during the three test runs required by § 63.805(c)(1).

(5) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(2) or (b)(2) that comply through the procedures established in § 63.804 (b), (c)(1), or (e)(1), shall submit an initial compliance status report, as required by § 63.807(b), stating that compliant contact adhesives are being used by the affected source.

(6) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(2)(ii) or (b)(2) that comply through the procedures established in § 63.804 (c)(2) or (e)(2), shall demonstrate initial compliance by:

(i) Submitting a monitoring plan that identifies each operating parameter to be monitored for the capture device and discusses why each parameter is appropriate for demonstrating continuous compliance;

(ii) Conducting an initial performance test as required under § 63.7 using the procedures and test methods listed in § 63.7 and § 63.805 (c) and (d) or (e);

(iii) Calculating the overall control efficiency (R) following the procedures in § 63.805 (d) or (e); and

(iv) Determining those operating conditions critical to determining compliance and establishing one or more

operating parameters that will ensure compliance with the standard.

(A) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter.

(B) For compliance with a catalytic incinerator equipped with a fixed catalyst bed, the minimum gas temperature both upstream and downstream of the catalyst shall be the operating parameter.

(C) For compliance with a catalytic incinerator equipped with a fluidized catalyst bed, the minimum gas temperature upstream of the catalyst bed and the pressure drop across the catalyst bed shall be the operating parameters.

(v) Owners or operators complying with § 63.804(f)(6) shall calculate each site-specific operating parameter value as the arithmetic average of the maximum or minimum operating values as appropriate, that demonstrate compliance with the standards, during the three test runs required by § 63.805(c)(1).

(7) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(3) or (b)(3) shall submit an initial compliance status report, as required by § 63.807(b), stating that compliant strippable spray booth coatings are being used by the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in § 63.803 shall submit an initial compliance status report, as required by § 63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

(g) *Continuous compliance demonstrations.* (1) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(1) or (d)(1) shall demonstrate continuous compliance by submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by § 63.807(c).

(i) The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater

than 1.0 for existing sources or 0.8 for new sources. An affected source is in violation of the standard if E is greater than 1.0 for existing sources or 0.8 for new sources for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(2) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(2) or (d)(2) shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by § 63.807(c).

(i) The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(3) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that are complying through the procedures established in § 63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures in paragraph (g)(3) (i) or (ii) of this section.

(i) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records,

using compliant thinners, and submitting a compliance certification with the semiannual report required by § 63.807(c).

(A) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

(B) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(ii) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by § 63.807(c).

(A) The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.

(B) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(C) An affected source is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in § 63.804 (a)(2) or (d)(2), as determined using EPA Method 311, or the viscosity of the coating in

the reservoir is less than the viscosity of the initial coating.

(4) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(1) or (b)(1) that comply through the procedures established in § 63.804 (a)(3) or (d)(3) shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturer's specifications. The owner or operator shall also submit the excess emissions and continuous monitoring system performance report and summary report required by § 63.807(d) and § 63.10(e) of subpart A.

(i) Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance with § 63.804(f)(6)(i) is required.

(ii) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where a thermal incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(B) Where a catalytic incinerator equipped with a fixed catalyst bed is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(C) Where a catalytic incinerator equipped with a fluidized catalyst bed is used, a temperature monitoring device shall be installed in the gas stream immediately before the bed. In addition, a pressure monitoring device shall be installed to determine the pressure drop across the catalyst bed. The pressure drop shall be measured monthly at a constant flow rate.

(iii) Where a carbon adsorber is used one of the following is required:

(A) An integrating stream flow monitoring device having an accuracy of ± 10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed temperature monitoring device, having an accuracy of ± 1 percent of the temperature being monitored or ± 0.5 °C,

whichever is greater, and capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle;

(B) An organic monitoring device, equipped with a continuous recorder, to indicate the concentration level of organic compounds exiting the carbon adsorber; or

(C) Any other monitoring device that has been approved by the Administrator in accordance with § 63.804(f)(4)(iv)(D).

(iv) Owners or operators of an affected source shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

(v) Owners or operators of an affected source that are complying through the use of a catalytic incinerator equipped with a fluidized catalyst bed shall maintain a constant pressure drop, measured monthly, across the catalyst bed.

(vi) An owner or operator who uses a control device not listed in § 63.804(f)(4) shall submit, for the Administrator's approval, a description of the device, test data verifying performance, and appropriate site-specific operating parameters that will be monitored to demonstrate continuous compliance with the standard.

(5) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(2) (i) or (ii) or (b)(2) that comply through the procedures established in § 63.804 (b), (c)(1), or (e)(1), shall submit a compliance certification with the semiannual report required by § 63.807(c).

(i) The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.

(ii) The compliance certification shall be signed by a responsible official

of the company that owns or operates the affected source.

(6) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(2)(ii) or (b)(2) that comply through the procedures established in § 63.804 (c)(2) or (e)(2), shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to the manufacturer's specifications. The owner or operator shall also submit the excess emissions and continuous monitoring system performance report and summary report required by § 63.807(d) and § 63.10(e) of subpart A of this part.

(i) Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance with § 63.804(f)(6)(i) is required.

(ii) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where a thermal incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(B) Where a catalytic incinerator equipped with a fixed catalyst bed is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(C) Where a catalytic incinerator equipped with a fluidized catalyst bed is used, a temperature monitoring device shall be installed in the gas stream immediately before the bed. In addition, a pressure monitoring device shall be installed to measure the pressure drop across the catalyst bed. The pressure drop shall be measured monthly at a constant flow rate.

(iii) Where a carbon adsorber is used one of the following is required:

(A) An integrating stream flow monitoring device having an accuracy of ± 10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed temperature monitoring device, having an accuracy of ± 1 percent of the temperature being monitored or ± 0.5 °C,

whichever is greater, and capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle;

(B) An organic monitoring device, equipped with a continuous recorder, to indicate the concentration level of organic compounds exiting the carbon adsorber; or

(C) Any other monitoring device that has been approved by the Administrator in accordance with § 63.804(f)(4)(iv)(D).

(iv) Owners or operators of an affected source shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

(v) Owners or operators of an affected source that are complying through the use of a catalytic incinerator equipped with a fluidized catalyst bed shall maintain a constant pressure drop, measured monthly, across the catalyst bed.

(vi) An owner or operator using a control device not listed in this section shall submit to the Administrator a description of the device, test data verifying the performance of the device, and appropriate operating parameter values that will be monitored to demonstrate continuous compliance with the standard. Compliance using this device is subject to the Administrator's approval.

(7) Owners or operators of an affected source subject to the provisions of § 63.802 (a)(3) or (b)(3) shall submit a compliance certification with the semi-annual report required by § 63.807(c).

(i) The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in § 63.803 shall submit a compliance certification with the semi-annual report required by § 63.807(c).

(i) The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an owner or operator is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

§ 63.805 Performance test methods.

(a) The EPA Method 311 of appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The EPA Method 24 (40 CFR part 60, appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Administrator that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The owner or operator of an affected source may request approval from the Administrator to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the EPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were

correct. Sampling procedures shall follow the guidelines presented in “Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A,” EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

(b) Owners or operators demonstrating compliance in accordance with § 63.804 (f)(4) or (f)(6) and § 63.804 (g)(4) or (g)(6), or complying with any of the other emission limits of § 63.802 by operating a capture or control device shall determine the overall control efficiency of the control system (R) as the product of the capture and control device efficiency, using the test methods cited in § 63.805(c) and the procedures in § 63.805 (d) or (e).

(c) When an initial compliance demonstration is required by § 63.804 (f)(4) or (f)(6) of this subpart, the procedures in paragraphs (c)(1) through (c)(6) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) The EPA Method 18 (40 CFR part 60, appendix A) shall be used to determine the HAP concentration of gaseous air streams. The test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(2) The EPA Method 1 or 1A (40 CFR part 60, appendix A) shall be used for sample and velocity traverses.

(3) The EPA Method 2, 2A, 2C, or 2D (40 CFR part 60, appendix A) shall be used to measure velocity and volumetric flow rates.

(4) The EPA Method 3 (40 CFR part 60, appendix A) shall be used to analyze the exhaust gases.

(5) The EPA Method 4 (40 CFR part 60, appendix A) shall be used to measure the moisture in the stack gas.

(6) The EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(d) Each owner or operator of an affected source demonstrating compliance in accordance with § 63.804 (f)(4) or

(f)(6) shall perform a gaseous emission test using the following procedures:

(1) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP emissions can be accurately determined by the applicable test methods specified in § 63.805(c) (1) through (6);

(2) Determine capture efficiency from the affected emission point(s) by capturing, venting, and measuring all HAP emissions from the affected emission point(s). During a performance test, the owner or operator shall isolate affected emission point(s) located in an area with other nonaffected gaseous emission sources from all other gaseous emission point(s) by any of the following methods:

(i) Build a temporary total enclosure (see § 63.801) around the affected emission point(s); or

(ii) Use the building that houses the process as the enclosure (see § 63.801);

(iii) Use any alternative protocol and test method provided they meet either the requirements of the data quality objective (DQO) approach or the lower confidence level (LCL) approach (see § 63.801);

(iv) Shut down all nonaffected HAP emission point(s) and continue to exhaust fugitive emissions from the affected emission point(s) through any building ventilation system and other room exhausts such as drying ovens. All exhaust air must be vented through stacks suitable for testing; or

(v) Use another methodology approved by the Administrator provided it complies with the EPA criteria for acceptance under part 63, appendix A, Method 301.

(3) Operate the control device with all affected emission points that will subsequently be delivered to the control device connected and operating at maximum production rate;

(4) Determine the efficiency (F) of the control device using the following equation:

ER07DE95.000

(5) Determine the efficiency (N) of the capture system using the following equation:

ER07DE95.001

(6) For each affected source complying with §63.802(a)(1) in accordance with §63.804(a)(3), compliance is demonstrated if the product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 2 is no greater than 1.0.

(7) For each new affected source complying with §63.802(b)(1) in accordance with §63.804(d)(3), compliance is demonstrated if the product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 4 is no greater than 0.8.

(8) For each affected source complying with §63.802(a)(2)(ii) in accordance with §63.804(c)(2), compliance is demonstrated if the product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 1.0.

(9) For each new affected source complying with §63.802(b)(2) in accordance with §63.804(e)(2), compliance is demonstrated if the product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2.

(e) An alternative method to the compliance method in §63.805(d) is the installation of a permanent total enclosure around the affected emission point(s). A permanent total enclosure presents prima facie evidence that all HAP emissions from the affected emis-

sion point(s) are directed to the control device. Each affected source that complies using a permanent total enclosure shall:

(1) Demonstrate that the total enclosure meets the requirements in paragraphs (e)(1) (i) through (iv). The owner or operator of an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

(i) The total area of all natural draft openings shall not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;

(ii) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(iii) The average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(A) All forced makeup air ducts and all exhaust ducts are constructed so

§ 63.806

40 CFR Ch. I (7–1–99 Edition)

that the volumetric flow rate in each can be accurately determined by the test methods specified in § 63.805 (c)(2) and (3). Volumetric flow rates shall be

calculated without the adjustment normally made for moisture content; and

(B) Determine FV by the following equation:

ER07de95.002

(iv) All access doors and windows whose areas are not included as natural draft openings and are not included in the calculation of FV shall be closed during routine operation of the process.

(2) Determine the control device efficiency using Equation (5), and the test methods and procedures specified in § 63.805 (c)(1) through (6).

(3) For each affected source complying with § 63.802(a)(1) in accordance with § 63.804(a)(3), compliance is demonstrated if:

(i) The installation of a permanent total enclosure is demonstrated ($N=1$);

(ii) The value of F is determined from Equation (5); and

(iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 2 is no greater than 1.0.

(4) For each new affected source complying with § 63.802(b)(1) in accordance with § 63.804(d)(3), compliance is demonstrated if:

(i) The installation of a permanent total enclosure is demonstrated ($N = 1$);

(ii) The value of F is determined from Equation (5); and

(iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 4 is no greater than 0.8.

(5) For each affected source complying with § 63.802(a)(2)(ii) in accordance with § 63.804(c)(2), compliance is demonstrated if:

(i) The installation of a permanent total enclosure is demonstrated ($N=1$);

(ii) The value of F is determined from Equation (5); and

(iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 1.0.

(6) For each new affected source complying with § 63.802(b)(2) in accordance with § 63.804(e)(2), compliance is demonstrated if:

(i) The installation of a permanent total enclosure is demonstrated ($N=1$);

(ii) The value of F is determined from Equation (5); and

(iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2.

§ 63.806 Recordkeeping requirements.

(a) The owner or operator of an affected source subject to this subpart shall fulfill all recordkeeping requirements of § 63.10 of subpart A, according to the applicability criteria in § 63.800(d) of this subpart.

(b) The owner or operator of an affected source subject to the emission limits in § 63.802 of this subpart shall maintain records of the following:

(1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in § 63.802; and

(2) The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in § 63.802; and

(3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in § 63.802 (a)(3) or (b)(3).

(c) The owner or operator of an affected source following the compliance method in § 63.804 (a)(1) or (d)(1) shall maintain copies of the averaging calculation for each month following the

compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.

(d) The owner or operator of an affected source following the compliance procedures of § 63.804 (f)(3)(ii) and (g)(3)(ii) shall maintain the records required by § 63.806(b) as well as records of the following:

(1) Solvent and coating additions to the continuous coater reservoir;

(2) Viscosity measurements; and

(3) Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.

(e) The owner or operator of an affected source subject to the work practice standards in § 63.803 of this subpart shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

(1) Records demonstrating that the operator training program required by § 63.803(b) is in place;

(2) Records collected in accordance with the inspection and maintenance plan required by § 63.803(c);

(3) Records associated with the cleaning solvent accounting system required by § 63.803(d);

(4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by § 63.803(h)(5).

(5) Records associated with the formulation assessment plan required by § 63.803(l); and

(6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

(f) The owner or operator of an affected source following the compliance method of § 63.804 (f)(4) or (g)(4) shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of E_{ac} required by Equations 2 or 4, records of the operating parameter values, and copies of the semiannual compliance reports required by § 63.807(d).

(g) The owner or operator of an affected source following the compliance method of § 63.804 (f)(6) or (g)(6), shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the applicable value of G_{ac} calculated using Equation 3, records of the operating parameter values, and copies of the semiannual compliance reports required by § 63.807(d).

(h) The owner or operator of an affected source subject to the emission limits in § 63.802 and following the compliance provisions of § 63.804(f) (1), (2), (3), (5), (7) and (8) and § 63.804(g) (1), (2), (3), (5), (7), and (8) shall maintain records of the compliance certifications submitted in accordance with § 63.807(c) for each semiannual period following the compliance date.

(i) The owner or operator of an affected source shall maintain records of all other information submitted with the compliance status report required by § 63.9(h) and § 63.807(b) and the semiannual reports required by § 63.807(c).

(j) The owner or operator of an affected source shall maintain all records in accordance with the requirements of § 63.10(b)(1).

§ 63.807 Reporting requirements.

(a) The owner or operator of an affected source subject to this subpart shall fulfill all reporting requirements of § 63.7 through § 63.10 of subpart A (General Provisions) according to the applicability criteria in § 63.800(d) of this subpart.

(b) The owner or operator of an affected source demonstrating compliance in accordance with § 63.804(f) (1), (2), (3), (5), (7) and (8) shall submit the compliance status report required by § 63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by § 63.804(f) (1), (2), (3), (5), (7), and (8) of this subpart.

(c) The owner or operator of an affected source demonstrating compliance in accordance with § 63.804(g) (1), (2), (3), (5), (7), and (8) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:

(1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

(2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

(3) The semiannual reports shall include the information required by § 63.804(g) (1), (2), (3), (5), (7), and (8), a statement of whether the affected source was in compliance or non-compliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.

(4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

(d) The owner or operator of an affected source demonstrating compliance in accordance with § 63.804(g) (4) and (6) of this subpart shall submit the excess emissions and continuous monitoring system performance report and summary report required by § 63.10(e) of subpart A. The report shall include the monitored operating parameter values required by § 63.804(g) (4) and (6). If the source experiences excess emissions, the report shall be submitted quarterly for at least 1 year after the excess

emissions occur and until a request to reduce reporting frequency is approved, as indicated in § 63.10(e)(3)(C). If no excess emissions occur, the report shall be submitted semiannually.

(e) The owner or operator of an affected source required to provide a written notification under § 63.803(1)(4) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

§ 63.808 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under § 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) The authority conferred in § 63.804(f)(4)(iv) (D) and (E), § 63.804(g)(4)(iii)(C), § 63.804(g)(4)(vi), § 63.804(g)(6)(vi), § 63.805(a), § 63.805(d)(2)(V), and § 63.805(e)(1) shall not be delegated to any State.

§§ 63.809–63.819 [Reserved]

TABLES TO SUBPART JJ TO PART 63

TABLE 1.—GENERAL PROVISIONS APPLICABILITY TO SUBPART JJ

| Reference | Applies to subpart JJ | Comment |
|------------------|-----------------------|--|
| 63.1(a) | Yes | Subpart JJ specifies applicability. |
| 63.1(b)(1) | No | |
| 63.1(b)(2) | Yes | |
| 63.1(b)(3) | Yes | Subpart JJ specifies applicability. |
| 63.1(c)(1) | No | |
| 63.1(c)(2) | No | |
| 63.1(c)(4) | Yes | Area sources are not subject to subpart JJ. |
| 63.1(c)(5) | Yes | |
| 63.1(e) | Yes | |
| 63.2 | Yes | Additional terms are defined in 63.801(a) of subpart JJ. When overlap between subparts A and JJ occurs, subpart JJ takes precedence. |
| 63.3 | Yes | |
| 63.4 | Yes | |
| 63.5 | Yes | Other units used in subpart JJ are defined in 63.801(b). |
| 63.6(a) | Yes | |
| 63.6(b)(1) | Yes | |
| 63.6(b)(2) | Yes | May apply when standards are proposed under Section 112(f) of the CAA. |
| 63.6(b)(3) | Yes | |
| 63.6(b)(4) | No | |
| 63.6(b)(5) | Yes | |
| 63.6(b)(7) | Yes | |
| 63.6(c)(1) | Yes | |
| 63.6(c)(2) | No | |
| 63.6(c)(5) | Yes | |
| 63.6(e)(1) | Yes | |
| 63.6(e)(2) | Yes | |

TABLE 1.—GENERAL PROVISIONS APPLICABILITY TO SUBPART JJ—Continued

| Reference | Applies to sub-part JJ | Comment |
|---------------------------|------------------------|---|
| 63.6(e)(3) | Yes | Applies only to affected sources using a control device to comply with the rule. Affected sources complying through the procedures specified in 63.804 (a)(1), (a)(2), (b), (c)(1), (d)(1), (d)(2), (e)(1), and (e)(2) are subject to the emission standards at all times, including periods of startup, shutdown, and malfunction. |
| 63.6(f)(1) | No | |
| 63.6(f)(2) | Yes | Applies only to affected sources using a control device to comply with the rule. |
| 63.6(f)(3) | Yes | |
| 63.6(g) | Yes | |
| 63.6(h) | No. | |
| 63.6 (i)(1)—(i)(3) | Yes | |
| 63.6(i)(4)(i) | Yes | |
| 63.6(i)(4)(ii) | No. | |
| 63.6 (i)(5)—(i)(14) | Yes | |
| 63.6(i)(16) | Yes | |
| 63.6(j) | Yes | |
| 63.7 | Yes | |
| 63.8 | Yes | |
| 63.9(a) | Yes | |
| 63.9(b) | Yes | |
| 63.9(c) | Yes | Applies only to affected sources using a control device to comply with the rule. |
| 63.9(d) | Yes | |
| 63.9(e) | Yes | |
| 63.9(f) | No | |
| 63.9(g) | Yes | |
| 63.9(h) | Yes | |
| 63.9(i) | Yes | |
| 63.9(j) | Yes | |
| 63.10(a) | Yes | |
| 63.10(b)(1) | Yes | |
| 63.10(b)(2) | Yes | Applies only to affected sources using a control device to comply with the rule. |
| 63.10(b)(3) | Yes | |
| 63.10(c) | Yes | |
| 63.10(d)(1) | Yes | |
| 63.10(d)(2) | Yes | |
| 63.10(d)(3) | No | |
| 63.10(d)(4) | Yes | |
| 63.10(d)(5) | Yes | |
| 63.10(e) | Yes | |
| 63.10(f) | Yes | |
| 63.11 | No | Applies only to affected sources using a control device to comply with the rule. |
| 63.12–63.15 | Yes | |

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS

| Chemical name | CAS No. |
|---|---------|
| Acetaldehyde | 75070 |
| Acetamide | 60355 |
| Acetonitrile | 75058 |
| Acetophenone | 98862 |
| 2-Acetylaminofluorine | 53963 |
| Acrolein | 107028 |
| Acrylamide | 79061 |
| Acrylic acid | 79107 |
| Acrylonitrile | 107131 |
| Allyl chloride | 107051 |
| 4-Aminobiphenyl | 92671 |
| Aniline | 62533 |
| o-Anisidine | 90040 |
| Benzene | 71432 |
| Benzidine | 92875 |
| Benzotrifluoride | 98077 |
| Benzyl chloride | 100447 |
| Biphenyl | 92524 |
| Bis (2-ethylhexyl) phthalate (DEHP) | 117817 |
| Bis (chloromethyl) ether | 542881 |

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

| Chemical name | CAS No. |
|--|---------|
| Bromoform | 75252 |
| 1,3-Butadiene | 106990 |
| Carbon disulfide | 75150 |
| Carbon tetrachloride | 56235 |
| Carbonyl sulfide | 463581 |
| Catechol | 120809 |
| Chloroacetic acid | 79118 |
| 2-Chloroacetophenone | 532274 |
| Chlorobenzene | 108907 |
| Chloroform | 67663 |
| Chloromethyl methyl ether | 107302 |
| Chloroprene | 126998 |
| Cresols (isomers and mixture) | 131973 |
| o-Cresol | 95487 |
| m-Cresol | 108394 |
| p-Cresol | 106445 |
| Cumene | 98828 |
| 2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters) | 94757 |

Pt. 63, Subpt. JJ, Table 3

40 CFR Ch. I (7–1–99 Edition)

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

| Chemical name | CAS No. |
|--|---------|
| DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene) | 72559 |
| Diazomethane | 334883 |
| Dibenzofuran | 132649 |
| 1,2-Dibromo-3-chloropropane | 96128 |
| Dibutylphthalate | 84742 |
| 1,4-Dichlorobenzene | 106467 |
| 3,3'-Dichlorobenzidine | 91941 |
| Dichloroethyl ether (Bis(2-chloroethyl)ether) | 111444 |
| 1,3-Dichloropropene | 542756 |
| Diethanolamine | 111422 |
| N,N-Dimethylaniline | 121697 |
| Diethyl sulfate | 64675 |
| 3,3'-Dimethoxybenzidine | 119904 |
| 4-Dimethylaminoazobenzene | 60117 |
| 3,3'-Dimethylbenzidine | 119937 |
| Dimethylcarbamoyl chloride | 79447 |
| N,N-Dimethylformamide | 68122 |
| 1,1-Dimethylhydrazine | 57147 |
| Dimethyl phthalate | 131113 |
| Dimethyl sulfate | 77781 |
| 4,6-Dinitro-o-cresol, and salts | 534521 |
| 2,4-Dinitrophenol | 51285 |
| 2,4-Dinitrotoluene | 121142 |
| 1,4-Dioxane (1,4-Diethyleneoxide) | 123911 |
| 1,2-Diphenylhydrazine | 122667 |
| Epichlorohydrin (1-Chloro-2,3-epoxypropane) | 106898 |
| 1,2-Epoxybutane | 106887 |
| Ethyl acrylate | 140885 |
| Ethylbenzene | 100414 |
| Ethyl carbamate (Urethane) | 51796 |
| Ethyl chloride (Chloroethane) | 75003 |
| Ethylene dibromide (Dibromoethane) | 106934 |
| Ethylene dichloride (1,2-Dichloroethane) | 107062 |
| Ethylene glycol | 107211 |
| Ethylene oxide | 75218 |
| Ethylenethiourea | 96457 |
| Ethylidene dichloride (1,1-Dichloroethane) | 75343 |
| Formaldehyde | 50000 |
| Glycolethers ^a | |
| Hexachlorobenzene | 118741 |
| Hexachloro-1,3-butadiene | 87683 |
| Hexachloroethane | 67721 |
| Hexamethylene-1,6-diisocyanate | 822060 |
| Hexamethylphosphoramide | 680319 |
| Hexane | 110543 |
| Hydrazine | 302012 |
| Hydroquinone | 123319 |
| Isophorone | 78591 |
| Maleic anhydride | 108316 |
| Methanol | 67561 |
| Methyl bromide (Bromomethane) | 74839 |
| Methyl chloride (Chloromethane) | 74873 |
| Methyl chloroform (1,1,1-Trichloroethane) | 71556 |
| Methyl ethyl ketone (2-Butanone) | 78933 |
| Methylhydrazine | 60344 |
| Methyl iodide (Iodomethane) | 74884 |
| Methyl isobutyl ketone (Hexone) | 108101 |
| Methyl isocyanate | 624839 |
| Methyl methacrylate | 80626 |
| Methyl tert-butyl ether | 1634044 |
| 4,4'-Methylenebis (2-chloroaniline) | 101144 |

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

| Chemical name | CAS No. |
|--|---------|
| Methylene chloride (Dichloromethane) | 75092 |
| 4,4'-Methylenediphenyl diisocyanate (MDI) | 101688 |
| 4,4'-Methylenedianiline | 101779 |
| Naphthalene | 91203 |
| Nitrobenzene | 98953 |
| 4-Nitrobiphenyl | 92933 |
| 4-Nitrophenol | 100027 |
| 2-Nitropropane | 79469 |
| N-Nitroso-N-methylurea | 684935 |
| N-Nitrosodimethylamine | 62759 |
| N-Nitrosomorpholine | 59892 |
| Phenol | 108952 |
| p-Phenylenediamine | 106503 |
| Phosgene | 75445 |
| Phthalic anhydride | 85449 |
| Polychlorinated biphenyls (Aroclors) | 1336363 |
| Polycyclic Organic Matter ^b | |
| 1,3-Propane sultone | 1120714 |
| beta-Propiolactone | 57578 |
| Propionaldehyde | 123386 |
| Propoxur (Baygon) | 114261 |
| Propylene dichloride (1,2-Dichloropropane) | 78875 |
| Propylene oxide | 75569 |
| 1,2-Propylenimine (2-Methyl aziridine) | 75558 |
| Quinone | 106514 |
| Styrene | 100425 |
| Styrene oxide | 96093 |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | 1746016 |
| 1,1,2,2-Tetrachloroethane | 79345 |
| Tetrachloroethylene (Perchloroethylene) | 127184 |
| Toluene | 108883 |
| 2,4-Toluenediamine | 95807 |
| Toluene-2,4-diisocyanate | 584849 |
| o-Toluidine | 95534 |
| 1,2,4-Trichlorobenzene | 120821 |
| 1,1,2-Trichloroethane | 79005 |
| Trichloroethylene | 79016 |
| 2,4,5-Trichlorophenol | 95954 |
| 2,4,6-Trichlorophenol | 88062 |
| Triethylamine | 121448 |
| Trifluralin | 1582098 |
| 2,2,4-Trimethylpentane | 540841 |
| Vinyl acetate | 108054 |
| Vinyl bromide | 593602 |
| Vinyl chloride | 75014 |
| Vinylidene chloride (1,1-Dichloroethylene) | 75354 |
| Xylenes (isomers and mixture) | 1330207 |
| o-Xylene | 95476 |
| m-Xylene | 108383 |
| p-Xylene | 106423 |

^a Includes mono- and di-ethers of ethylene glycol, diethylene glycols and triethylene glycol; R-(OCH₂CH₂)_n-OR where: n = 1, 2, or 3, R = alkyl or aryl groups
^b R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH₂)_n-OH. Polymers are excluded from the glycol category.
^c Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

[63 FR 71381, Dec. 28, 1998]

TABLE 3.—SUMMARY OF EMISSION LIMITS

| Emission point | Existing source | New source |
|---|--------------------|--------------------|
| Finishing Operations: | | |
| (a) Achieve a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) | ^a 1.0 | ^a 0.8 |
| (b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied): | | |
| —stains | ^a 1.0 | ^a 1.0 |
| —washcoats | ^{a,b} 1.0 | ^{a,b} 0.8 |
| —sealers | ^a 1.0 | ^a 0.8 |
| —topcoats | ^a 1.0 | ^a 0.8 |
| —basecoats | ^{a,b} 1.0 | ^{a,b} 0.8 |
| —enamels | ^{a,b} 1.0 | ^{a,b} 0.8 |
| —thinners (maximum percent VHAP allowable); or | 10.0 | 10.0 |
| (c) As an alternative, use control device; or | ^c 1.0 | ^c 0.8 |
| (d) Use any combination of (a), (b), and (c) | 1.0 | 0.8 |
| Cleaning Operations: | | |
| Strippable spray booth material (maximum VOC content, kg VOC/kg solids [lb VOC/lb solids]) | 0.8 | 0.8 |
| Contact Adhesives: | | |
| (a) Use compliant contact adhesives (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) based on following criteria: | | |
| i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates | ^d NA | ^d NA |
| ii. For foam adhesives used in products that meet flammability requirements | 1.8 | 0.2 |
| iii. For all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or | 1.0 | 0.2 |
| (b) Use a control device | ^e 1.0 | ^e 0.2 |

^aThe limits refer to the VHAP content of the coating, as applied.

^bWashcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent VHAP by weight.

^cThe control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.8 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

^dThere is no limit on the VHAP content of these adhesives.

^eThe control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.2 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

[60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30260, June 3, 1997]

TABLE 4.—POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS

| Chemical name | CAS No. |
|---|---------|
| 4-Aminobiphenyl | 92671 |
| Styrene oxide | 96093 |
| Diethyl sulfate | 64675 |
| N-Nitrosomorpholine | 59892 |
| Dimethyl formamide | 68122 |
| Hexamethylphosphoramide | 680319 |
| Acetamide | 60355 |
| 4,4'-Methylenedianiline | 101779 |
| o-Anisidine | 90040 |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | 1746016 |
| Beryllium salts | |
| Benzidine | 92875 |
| N-Nitroso-N-methylurea | 684935 |
| Bis (chloromethyl) ether | 542881 |
| Dimethyl carbamoyl chloride | 79447 |
| Chromium compounds (hexavalent) | |
| 1,2-Propylenimine (2-Methyl aziridine) | 75558 |
| Arsenic and inorganic arsenic compounds | 9999904 |
| Hydrazine | 302012 |
| 1,1-Dimethyl hydrazine | 57147 |
| Beryllium compounds | 7440417 |
| 1,2-Dibromo-3-chloropropane | 96128 |
| N-Nitrosodimethylamine | 62759 |
| Cadmium compounds | |
| Benzo (a) pyrene | 50328 |
| Polychlorinated biphenyls (Aroclors) | 1336363 |
| Heptachlor | 76448 |
| 3,3'-Dimethyl benzidine | 119937 |

TABLE 4.—POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS—Continued

| Chemical name | CAS No. |
|--|----------|
| Nickel subsulfide | 12035722 |
| Acrylamide | 79061 |
| Hexachlorobenzene | 118741 |
| Chlordane | 57749 |
| 1,3-Propane sultone | 1120714 |
| 1,3-Butadiene | 106990 |
| Nickel refinery dust | |
| 2-Acetylaminofluorine | 53963 |
| 3,3'-Dichlorobenzidine | 53963 |
| Lindane (hexachlorocyclohexane, gamma) | 58899 |
| 2,4-Toluene diamine | 95807 |
| Dichloroethyl ether (Bis(2-chloroethyl) ether) | 111444 |
| 1,2-Diphenylhydrazine | 122667 |
| Toxaphene (chlorinated camphene) | 8001352 |
| 2,4-Dinitrotoluene | 121142 |
| 3,3'-Dimethoxybenzidine | 119904 |
| Formaldehyde | 50000 |
| 4,4'-Methylene bis (2-chloroaniline) | 101144 |
| Acrylonitrile | 107131 |
| Ethylene dibromide (1,2-Dibromoethane) | 106934 |
| DDE (1,1-p-chlorophenyl 1-2 dichloroethylene) ... | 72559 |
| Chlorobenzilate | 510156 |
| Dichlorvos | 62737 |
| Vinyl chloride | 75014 |
| Coke Oven Emissions | |
| Ethylene oxide | 75218 |
| Ethylene thiourea | 96457 |

Pt. 63, Subpt. JJ, Table 5

40 CFR Ch. I (7–1–99 Edition)

TABLE 4.—POLLUTANTS EXCLUDED FROM USE
IN CLEANING AND WASHOFF SOLVENTS—Con-
tinued

| Chemical name | CAS No. |
|--|---------|
| Vinyl bromide (bromoethene) | 593602 |
| Selenium sulfide (mono and di) | 7488564 |
| Chloroform | 67663 |
| Pentachlorophenol | 87865 |
| Ethyl carbamate (Urethane) | 51796 |
| Ethylene dichloride (1,2-Dichloroethane) | 107062 |
| Propylene dichloride (1,2-Dichloropropane) | 78875 |
| Carbon tetrachloride | 56235 |
| Benzene | 71432 |
| Methyl hydrazine | 60344 |
| Ethyl acrylate | 140885 |
| Propylene oxide | 75569 |
| Aniline | 62533 |
| 1,4-Dichlorobenzene(p) | 106467 |
| 2,4,6-Trichlorophenol | 88062 |
| Bis (2-ethylhexyl) phthalate (DEHP) | 117817 |
| o-Toluidine | 95534 |
| Propoxur | 114261 |
| 1,4-Dioxane (1,4-Diethyleneoxide) | 123911 |
| Acetaldehyde | 75070 |
| Bromoform | 75252 |
| Captan | 133062 |
| Epichlorohydrin | 106898 |
| Methylene chloride (Dichloromethane) | 75092 |
| Dibenz (ah) anthracene | 53703 |
| Chrysene | 218019 |
| Dimethyl aminoazobenzene | 60117 |
| Benzo (a) anthracene | 56553 |
| Benzo (b) fluoranthene | 205992 |
| Antimony trioxide | 1309644 |

TABLE 4.—POLLUTANTS EXCLUDED FROM USE
IN CLEANING AND WASHOFF SOLVENTS—Con-
tinued

| Chemical name | CAS No. |
|--|---------|
| 2-Nitropropane | 79469 |
| 1,3-Dichloropropene | 542756 |
| 7, 12-Dimethylbenz(a) anthracene | 57976 |
| Benz(c) acridine | 225514 |
| Indeno(1,2,3-cd)pyrene | 193395 |
| 1,2:7,8-Dibenzopyrene | 189559 |

[63 FR 71382, Dec. 28, 1998]

TABLE 5.—LIST OF VHAP OF POTENTIAL
CONCERN IDENTIFIED BY INDUSTRY

| CAS No. | Chemical name | EPA de minimis, tons/yr |
|---------------|-----------------------|-------------------------|
| 68122 | Dimethyl formamide | 1.0 |
| 50000 | Formaldehyde | 0.2 |
| 75092 | Methylene chloride | 4.0 |
| 79469 | 2-Nitropropane | 1.0 |
| 78591 | Isophorone | 0.7 |
| 1000425 | Styrene monomer | 1.0 |
| 108952 | Phenol | 0.1 |
| 111422 | Dimethanolamine | 5.0 |
| 109864 | 2-Methoxyethanol | 10.0 |
| 111159 | 2-Ethoxyethyl acetate | 10.0 |

[63 FR 71382, Dec. 28, 1998]

TABLE 6.—VHAP OF POTENTIAL CONCERN

| CAS No. | Chemical name | EPA de minimis, tons/yr* |
|---------------|---|--------------------------|
| 92671 | 4-Aminobiphenyl | 1.0 |
| 96093 | Styrene oxide | 1.0 |
| 64675 | Diethyl sulfate | 1.0 |
| 59892 | N-Nitrosomorpholine | 1.0 |
| 68122 | Dimethyl formamide | 1.0 |
| 680319 | Hexamethylphosphoramide | 0.01 |
| 60355 | Acetamide | 1.0 |
| 101779 | 4,4'-Methylenedianiline | 1.0 |
| 90040 | o-Anisidine | 1.0 |
| 1746016 | 2,3,7,8-Tetrachlorodibenzo-p-dioxin | 0.00000006 |
| 92875 | Benzidine | 0.00003 |
| 684935 | N-Nitroso-N-methylurea | 0.00002 |
| 542881 | Bis(chloromethyl) ether | 0.00003 |
| 79447 | Dimethyl carbamoyl chloride | 0.002 |
| 75558 | 1,2-Propylenimine (2-Methyl aziridine) | 0.0003 |
| 57147 | 1,1-Dimethyl hydrazine | 0.0008 |
| 96128 | 1,2-Dibromo-3-chloropropane | 0.001 |
| 62759 | N-Nitrosodimethylamine | 0.0001 |
| 50328 | Benzo (a) pyrene | 0.001 |
| 1336363 | Polychlorinated biphenyls (Aroclors) | 0.0009 |
| 76448 | Heptachlor | 0.002 |
| 119937 | 3,3'-Dimethyl benzidine | 0.001 |
| 79061 | Acrylamide | 0.002 |
| 118741 | Hexachlorobenzene | 0.004 |
| 57749 | Chlordane | 0.005 |
| 1120714 | 1,3-Propane sultone | 0.003 |
| 106990 | 1,3-Butadiene | 0.007 |
| 53963 | 2-Acetylaminofluorine | 0.0005 |
| 91941 | 3,3'-Dichlorobenzidine | 0.02 |
| 58899 | Lindane (hexachlorocyclohexane, gamma) | 0.005 |
| 95807 | 2,4-Toluene diamine | 0.002 |
| 111444 | Dichloroethyl ether (Bis(2-chloroethyl)ether) | 0.006 |
| 122667 | 1,2-Diphenylhydrazine | 0.009 |
| 8001352 | Toxaphene (chlorinated camphene) | 0.006 |

TABLE 6.—VHAP OF POTENTIAL CONCERN—Continued

| CAS No. | Chemical name | EPA de mini- mis, tons/yr* |
|---------------|---|-------------------------------|
| 121142 | 2,4-Dinitrotoluene | 0.002 |
| 119904 | 3,3'-Dimethoxybenzidine | 0.01 |
| 50000 | Formaldehyde | 0.2 |
| 101144 | 4,4'-Methylene bis(2-chloroaniline) | 0.02 |
| 107131 | Acrylonitrile | 0.03 |
| 106934 | Ethylene dibromide(1,2-Dibromoethane) | 0.01 |
| 72559 | DDE (1,1-p-chlorophenyl 1-2 dichloroethylene) | 0.01 |
| 510156 | Chlorobenzilate | 0.04 |
| 62737 | Dichlorvos | 0.02 |
| 75014 | Vinyl chloride | 0.02 |
| 75218 | Ethylene oxide | 0.09 |
| 96457 | Ethylene thiourea | 0.06 |
| 593602 | Vinyl bromide (bromoethene) | 0.06 |
| 67663 | Chloroform | 0.09 |
| 87865 | Pentachlorophenol | 0.07 |
| 51796 | Ethyl carbamate (Urethane) | 0.08 |
| 107062 | Ethylene dichloride (1,2-Dichloroethane) | 0.08 |
| 78875 | Propylene dichloride (1,2-Dichloropropane) | 0.1 |
| 56235 | Carbon tetrachloride | 0.1 |
| 71432 | Benzene | 0.2 |
| 140885 | Ethyl acrylate | 0.1 |
| 75569 | Propylene oxide | 0.5 |
| 62533 | Aniline | 0.1 |
| 106467 | 1,4-Dichlorobenzene(p) | 0.3 |
| 88062 | 2,4,6-Trichlorophenol | 0.6 |
| 117817 | Bis (2-ethylhexyl) phthalate (DEHP) | 0.5 |
| 95534 | o-Toluidine | 0.4 |
| 114261 | Propoxur | 2.0 |
| 79016 | Trichloroethylene | 1.0 |
| 123911 | 1,4-Dioxane (1,4-Diethyleneoxide) | 0.6 |
| 75070 | Acetaldehyde | 0.9 |
| 75252 | Bromoform | 2.0 |
| 133062 | Captan | 2.0 |
| 106898 | Epichlorohydrin | 2.0 |
| 75092 | Methylene chloride (Dichloromethane) | 4.0 |
| 127184 | Tetrachloroethylene (Perchloroethylene) | 4.0 |
| 53703 | Dibenz (ah) anthracene | 0.01 |
| 218019 | Chrysene | 0.01 |
| 60117 | Dimethyl aminoazobenzene | 1.0 |
| 56553 | Benzo (a) anthracene | 0.01 |
| 205992 | Benzo (b) fluoranthene | 0.01 |
| 79469 | 2-Nitropropane | 1.0 |
| 542756 | 1,3-Dichloropropene | 1.0 |
| 57976 | 7,12-Dimethylbenz (a) anthracene | 0.01 |
| 225514 | Benz(c)acridine | 0.01 |
| 193395 | Indeno(1,2,3-cd)pyrene | 0.01 |
| 189559 | 1,2:7,8-Dibenzopyrene | 0.01 |
| 79345 | 1,1,2,2-Tetrachloroethane | 0.03 |
| 91225 | Quinoline | 0.0006 |
| 75354 | Vinylidene chloride (1,1-Dichloroethylene) | 0.04 |
| 87683 | Hexachlorobutadiene | 0.09 |
| 82688 | Pentachloronitrobenzene (Quintobenzene) | 0.03 |
| 78591 | Isophorone | 0.7 |
| 79005 | 1,1,2-Trichloroethane | 0.1 |
| 74873 | Methyl chloride (Chloromethane) | 1.0 |
| 67721 | Hexachloroethane | 0.5 |
| 1582098 | Trifluralin | 0.9 |
| 1319773 | Cresols/Cresylic acid (isomers and mixture) | 1.0 |
| 108394 | m-Cresol | 1.0 |
| 75343 | Ethylidene dichloride (1,1-Dichloroethane) | 1.0 |
| 95487 | o-Cresol | 1.0 |
| 106445 | p-Cresol | 1.0 |
| 74884 | Methyl iodide (Iodomethane) | 1.0 |
| 100425 | Styrene | 1.0 |
| 107051 | Allyl chloride | 1.0 |
| 334883 | Diazomethane | 1.0 |
| 95954 | 2,4,5—Trichlorophenol | 1.0 |
| 133904 | Chloramben | 1.0 |
| 106887 | 1,2—Epoxybutane | 1.0 |
| 108054 | Vinyl acetate | 1.0 |
| 126998 | Chloroprene | 1.0 |

TABLE 6.—VHAP OF POTENTIAL CONCERN—Continued

| CAS No. | Chemical name | EPA de minimis, tons/yr* |
|----------------|--|--------------------------|
| 123319 | Hydroquinone | 1.0 |
| 92933 | 4-Nitrobiphenyl | 1.0 |
| 56382 | Parathion | 0.1 |
| 13463393 | Nickel Carbonyl | 0.1 |
| 60344 | Methyl hydrazine | 0.006 |
| 151564 | Ethylene imine | 0.0003 |
| 77781 | Dimethyl sulfate | 0.1 |
| 107302 | Chloromethyl methyl ether | 0.1 |
| 57578 | beta-Propiolactone | 0.1 |
| 100447 | Benzyl chloride | 0.04 |
| 98077 | Benzotrithloride | 0.0006 |
| 107028 | Acrolein | 0.04 |
| 584849 | 2,4—Toluene diisocyanate | 0.1 |
| 75741 | Tetramethyl lead | 0.01 |
| 78002 | Tetraethyl lead | 0.01 |
| 12108133 | Methylcyclopentadienyl manganese | 0.1 |
| 624839 | Methyl isocyanate | 0.1 |
| 77474 | Hexachlorocyclopentadiene | 0.1 |
| 62207765 | Fluorine | 0.1 |
| 10210681 | Cobalt carbonyl | 0.1 |
| 79118 | Chloroacetic acid | 0.1 |
| 534521 | 4,6-Dinitro-o-cresol, and salts | 0.1 |
| 101688 | Methylene diphenyl diisocyanate | 0.1 |
| 108952 | Phenol | 0.1 |
| 62384 | Mercury, (acetato-o) phenyl | 0.01 |
| 98862 | Acetophenone | 1.0 |
| 108316 | Maleic anhydride | 1.0 |
| 532274 | 2-Chloroacetophenone | 0.06 |
| 51285 | 2,4-Dinitrophenol | 1.0 |
| 109864 | 2-Methoxy ethanol | 10.0 |
| 98953 | Nitrobenzene | 1.0 |
| 74839 | Methyl bromide (Bromomethane) | 10.0 |
| 75150 | Carbon disulfide | 1.0 |
| 121697 | N,N-Dimethylaniline | 1.0 |
| 106514 | Quinone | 5.0 |
| 123386 | Propionaldehyde | 5.0 |
| 120809 | Catechol | 5.0 |
| 85449 | Phthalic anhydride | 5.0 |
| 463581 | Carbonyl sulfide | 5.0 |
| 132649 | Dibenzofurans | 5.0 |
| 100027 | 4-Nitrophenol | 5.0 |
| 540841 | 2,2,4-Trimethylpentane | 5.0 |
| 111422 | Diethanolamine | 5.0 |
| 822060 | Hexamethylene-1,6-diisocyanate | 5.0 |
| | Glycol ethers ^a | 5.0 |
| | Polycyclic organic matter ^b | 0.01 |

*These values are based on the de minimis levels provided in the proposed rulemaking pursuant to section 112(g) of the Act using a 70-year lifetime exposure duration for all VHAP. Default assumptions and the de minimis values based on inhalation reference doses (RfC) are not changed by this adjustment.

^aExcept for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

^bExcept for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2,7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

[63 FR 71383, Dec. 28, 1998]